

# Open Research Online

---

The Open University's repository of research publications and other research outputs

## Evaluation of the *Process of Learning*: an educational programme engaging first year college students in critically reflecting upon how they learn

### Thesis

#### How to cite:

Fitzgerald, David (2001). Evaluation of the Process of Learning: an educational programme engaging first year college students in critically reflecting upon how they learn. PhD thesis The Open University.

For guidance on citations see [FAQs](#).

© 2000 The Author



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Version of Record

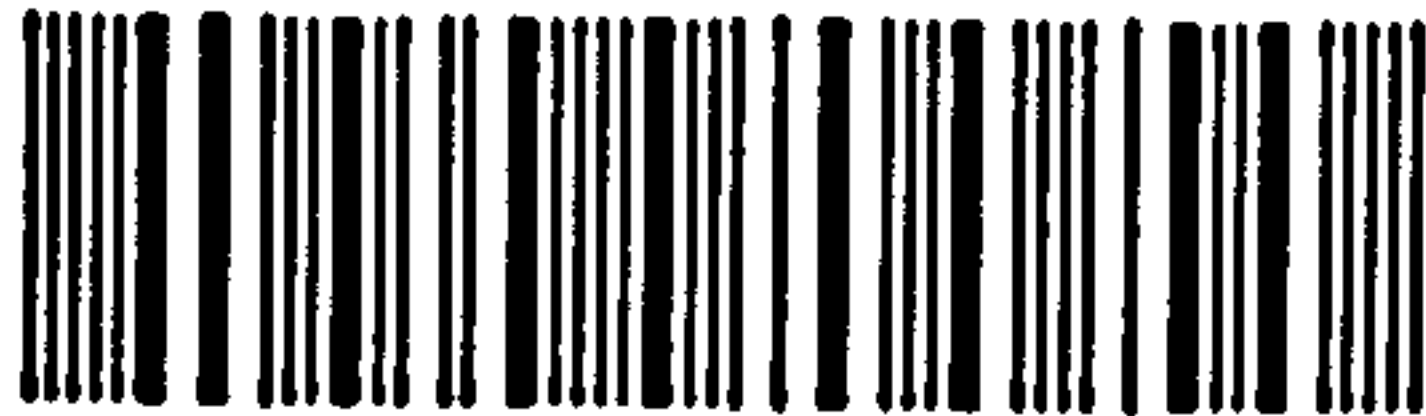
Link(s) to article on publisher's website:  
<http://dx.doi.org/doi:10.21954/ou.ro.0000dc93>

---

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

---

[oro.open.ac.uk](http://oro.open.ac.uk)



UNRESTRICTED

**Evaluation of the *Process of Learning* — An Educational  
Programme Engaging First Year College Students in  
Critically Reflecting upon How They Learn**

**David Fitzgerald  
B.Sc. Psychology, University College Dublin**

**Ph.D. Education, Open University**

**March 2000**

**AUTHOR NO : M7109532**

**DATE OF SUBMISSION : 9 OCTOBER 1995**

**DATE OF AWARD : 27 FEBRUARY 2001**

*For Mom and Dad,*

*Whose kindness is the true hope in life.*

## **Acknowledgements**

**I would like to sincerely thank Professor Tim O' Shea, Master – Birkbeck College, for the support and advice that he has given me over the past twelve months on all aspects of this thesis. His help and guidance gave me a great deal of encouragement in completing the task of resubmitting this thesis, and for this I am very grateful.**

**I would like to thank the staff and students at Thames Valley University for their support and participation in this research. I especially thank the DAMM students in Year 1 (1992/93) and the DAMM staff – Dr. David Grant and Mr. Chris Dawson for participating in this research programme.**

**I further extend my appreciation to Mr. Dave Stevens and Dr. Ivor Stilitz for making me feel part of the PINC psychology team.**



## Abstract

This thesis evaluates the effectiveness of having students reflect upon their experiences of learning and use of critical thinking in their first year of study at University. Specifically, it responds to the debate on whether teaching a general course on critical thinking skills constitutes a 'syntax or semantic' for the students. McPeck (1990) initiated this debate, claiming that teaching general courses on critical thinking skills do not improve students' processes of reasoning. He believes that such courses are not meaningful to students and their learning, stating that the thinking skills the students require, must instead be derived directly from the subjects that they are studying. Educators such as Paul (1991; Siegel 1990) disagree with McPeck and argue that these courses improve students' reasoning processes at University level.

In responding to this debate, I designed an introductory critical thinking skills course entitled the *Process of Learning*. This course was implemented with first year students enrolled on a design and media management course at a University in the United Kingdom. This case study was evaluated using an action research methodology. The findings of this research are discussed within the framework of student learning theory and the learning environment. The data includes student and staff interviews conducted over 18 months, triangulated findings from the course sessions and analysis of related assignments.

This research found that students can benefit from first year introductory critical thinking courses in several ways. Students become sensitised or aware of the critical thinking skills that they use in first year. The subsequent application of these skills can lead to improvement in learning quality outcomes in subsequent studies. Students with a higher level of competency discuss these thinking skills more coherently and recognise their personal responsibility in learning. Students achieve insights into their own personal perception of learning and begin to assess objectively the implications of what they have learnt from this. Wide ranging feedback from students discussing critical thinking skills and learning activities can provide a medium for staff committed to improving both pedagogy and the curriculum. Better understanding of critical thinking skills can improve the students' confidence in learning. Further insights are presented in this research that help us to further understand the nature of 'confidence' in learning.

Students identified a number of difficulties with the *Process of Learning*. This would appear initially to support McPeck's belief that such courses are not helpful to students in the first year of study. However, four key findings are presented in this thesis which explain why these difficulties arose. Consequently, this research supports educators who advocate the teaching of general critical thinking skills courses in higher education, due to the benefits for students and staff. It concludes that the 'syntax versus semantic' dichotomy is an oversimplification of the debate and explains why this is so. Finally, suggestions are made for future research directed at integrating critical thinking skills courses across the degree level at University.

# CONTENTS

<b>Acknowledgements</b>	<b>1</b>
<b>Abstract</b>	<b>2</b>
<b>1. Introduction to Thesis</b>	<b>8</b>
1.1 Aims of this research	8
1.2 Focus of this Research	9
1.3 Overview of the Process of Learning and Personal Development	9
1.3.1 The B.Sc. Psychology in the Community Degree.....	9
1.3.2 The Design and Media Management Degree.....	10
1.4 Aims of Both Educational Programmes	11
1.5 Negotiating Access to the College - Important Considerations	11
1.6 Structure of this Thesis	12
1.7 Central Issues in this Doctoral Research	14
<b>2. Critical Thinking and its Relation to Pedagogy in Higher Education</b>	<b>16</b>
2.1 Introduction	16
2.2 Definition of Critical Thinking and Courses in Higher Education	16
2.3 Background to the Critical Thinking Movement	17
2.4 Pedagogical Problems and their Effects on Student Learning	21
2.5 Criteria Necessary for a Comprehensive and Rigorous Definition of Critical Thinking	22
2.6 The Four Domains of Critical Thinking	23
2.7 Class Examples of Critical Thinking Innovations	25
2.8 Debate in Critical Thinking in Higher Education	28
2.9 Issues in Critical Thinking Responded to in this Thesis	31
<b>3. Student Learning Theory in Higher Education - a Conceptual Framework</b>	<b>33</b>
3.1 Introduction	33
3.2 Educational Research in Higher Education - a Dichotomy	34
3.3 Student Learning Experiences in Higher Education - a Theoretical Framework	35
3.4 Critique of Student Learning Theory — Methodology	40
3.5 Contextual Issues and Student Learning in Higher Education	44
3.5.1 The need for an illuminative description .....	44
3.6 Conclusions	46
<b>4. Methodological Considerations</b>	<b>48</b>



4.1 Introduction	48
4.2 Educational Research Methodology - An overview	48
4.3 The Qualitative/Quantitative Debate in Educational Research Methodology	49
4.4 Moving from Dichotomy to Unity - Rationale for Combining Methods	52
4.5 Ways to Combine Methods	53
4.6 Framework for Combining Methods Relevant to this Research	53
4.7 Action Research	54
4.8 Conclusions	58
5. Summary of the Preceding Chapters and Introduction to the <i>Process of Learning</i>	61
5.1 Summary of the Preceding Chapters	61
5.1.1 Student Learning Theory in Higher Education - a Conceptual Framework .....	61
5.1.2 Teaching Critical Thinking in Higher Education.....	63
5.1.3 Action Research Methodology.....	64
5.2 Research Methods and Data Analysis Utilised	66
5.3 Central Issues in this Thesis	68
5.4 Aims of the Process of Learning	68
5.5 Chronology of Events Prior to the Process of Learning	69
5.6 Course Content of the Process of Learning	71
6. Staff and First Year Students' Experiences of Learning on Design and Media Management. Implications for the Design and Evaluation of the <i>Process of Learning</i>	73
6.1 Introduction	73
6.2 Methodological Commentary	74
6.3 Interviews Conducted with Design and Media Management Students, June 1992	75
6.3.1 Reasons for Studying at Thames Valley University .....	75
6.3.3 Perceptions of Teaching Methods.....	76
6.3.4 Social and Personal Aspects of College Life .....	77
6.3.5 Awareness of Intellectual Development Due to Design and Media Management.....	78
6.3.6 Applying Design and Media Management Learning Skills in Other Domains.....	79
6.3.7 Quality of Tutorials.....	80
6.3.8 Importance of Developing Skill in Thinking .....	80
6.3.9 Responsibilities of Students and Teaching Staff in Learning Context.....	81
6.4 Interviews Conducted with Design and Media Management Staff	82
6.4.1 Teaching on Design and Media Management Year One .....	82
6.4.2 Perceptions of Student Competency in Learning on Design and Media Management.....	84
6.4.3 Factors Influencing Competency in Learning on Design and Media Management.....	84
6.4.4 Perceptions of Learning Objectives in First Year .....	85
6.4.5 Improving Design and Media Management Pedagogy.....	87
6.5 Analysis of Staff and Student Interviews and Implications for the Process of Learning	88
6.5.1 Introduction.....	88
6.5.2 Summary of Student Findings .....	89
6.5.3 Summary of Staff Findings.....	90
6.6 Comparison of Teacher and Student Perceptions and Implications for the Process of Learning	91
6.6.1 Integration.....	92
6.6.2 Reflecting the Freedom to Learn on Design and Media Management.....	92
6.6.3 The Concept of Ambiguity in First Year Design and Media Management Pedagogy.....	93
6.6.4 Applying Critical Thinking to Other Domains .....	94
6.6.5 Expectations for the Process of Learning in First Year Design and Media Management Studies..	94
6.7 Confidence in Learning in Higher Education .....	95
7. The Process of Learning- Description and Analysis of the Course Sessions	97



<b>7.1 Introduction</b>	<b>97</b>
<b>7.2 Analysis of the Process of Learning</b>	<b>98</b>
7.2.1 Session 1: 19.4.93, Student Attendance 18 .....	99
7.2.1.1 Aims of the Session .....	99
7.2.1.2 What I Did as Teacher, What the Students Did, the Pedagogic Rationale.....	102
7.2.1.3 Triangulation of Feedback from Students, Myself and Ella. ....	102
7.2.2 Session 2: 26.4.93, Attendance 20 .....	103
7.2.2.1 Aims of Session .....	103
7.2.2.2 What I Did as Teacher, What the Students Did, the Pedagogic Rationale.....	105
7.2.2.3 Triangulation of Feedback from Students, Myself and Ella. ....	105
7.2.3 Session 3: 10.5.93, Attendance 19 .....	108
7.2.3.1 Aims of Session .....	108
7.2.3.2 What I Did as Teacher, What the Students Did, the Pedagogic Rationale.....	110
7.2.3.3 Triangulation of Feedback from Students, Myself and Ella. ....	111
7.2.4 Session 4: 17.5.93, Attendance 15 .....	113
7.2.4.1 Aims of Session .....	114
7.2.4.2 What I did as Teacher, what the Students did, the Pedagogic Rationale .....	115
7.2.4.2 Triangulation of Feedback from Students, Myself and Ella. ....	115
<b>7.3 Triangulation of Findings and Discussion of Implications</b>	<b>116</b>
7.3.1 Recap of Issues Central to this Research .....	116
7.3.2 Increased Awareness of Learning for Students on Process of Learning.....	117
7.3.3 Student Concerns with Purpose of the Course.....	117
7.3.4 Critical Thinking - Syntax or Semantic?.....	118
7.3.5 Conclusions.....	119
<b>8. 1993 Interviews with Students Having Studied the <i>Process of Learning</i></b>	<b>122</b>
<b>8.1 Introduction</b>	<b>122</b>
<b>8.2 Interviews with Students having Studied the Process of Learning</b>	<b>123</b>
8.2.1 Interview with AA, 23/6/93, Self- Report.....	123
8.2.2 Analysis of AA Interview .....	124
8.2.3 Interview with BB, 14.6.93.....	125
8.2.4 Analysis of BB Interview.....	127
8.2.5 Interview with CC, 14.6.93 .....	128
8.2.6 Analysis of CC Interview.....	130
8.2.7 Interview with DD, 11.6.93 .....	131
8.2.8 Analysis of DD Interview .....	135
8.2.9 Interview with EE, 8.6.93 .....	136
8.2.10 Analysis of EE Interview .....	138
8.2.11 Interview with FF - 21.6.93, Self- Report.....	139
8.2.12 Analysis of FF Interview.....	141
8.2.13 Interview with GG, 4.6.93 .....	143
8.2.14 Analysis of GG Interview .....	144
8.2.15 Interview with HH, 4.6.93 .....	145
8.2.16 Analysis of HH Interview .....	147
<b>8.3 The Learning Context for Students Studying the Process of Learning</b>	<b>148</b>
8.3.1 Introduction.....	148
8.3.2 Importance of Subject Relevance for Students .....	148
8.3.3 Subject Diversity on Design and Media Management.....	149
8.3.4 Student Diversity on Design and Media Management.....	149
8.3.5 Students and Learning - Further Insight into Saljo's Conception of Learning .....	150
<b>8.4 Discussion: Teaching the Process of Learning - Syntax or Semantic?</b>	<b>151</b>
8.4.1 Introduction.....	151
8.4.2 Students Experience Benefits Emerging from the Process of Learning .....	151
8.4.3 Students Experience Difficulties with the Process of Learning .....	153
<b>9. The <i>Process of Learning</i> Assignment</b>	<b>157</b>

<b>9.1 Introduction</b>	<b>157</b>
<b>9.2 Overview and Commentary on the Process of Learning Assignments</b>	<b>158</b>
9.2.1 Nicola Markham: 55 %, Conception of Learning: 3.....	158
9.2.2 Commentary.....	159
9.2.3 Lori Cooper: 76 %, Conception of Learning: 5 .....	160
9.2.4 Commentary.....	163
9.2.5 Jackie Morgan: 65 %, Conception of Learning: 4 .....	164
9.2.6 Commentary.....	167
9.2.7 Vasilis Hadjivasiliou: 40 %, Conception of Learning: 3 .....	167
9.2.8 Commentary.....	168
9.2.9 Donna Bradshaw: 65 %, Conception of Learning: 3 .....	168
9.2.10 Commentary.....	171
9.2.11 Carol Rogerson: 53 %, Conception of Learning: 3.....	171
9.2.12 Commentary.....	175
9.2.13 Jayne Ralph: 55 %, Conception of Learning: 3 .....	176
9.2.14 Commentary.....	179
9.2.15 Assiya Amini: 75 %, Conception of Learning: 5.....	180
9.2.16 Commentary.....	183
<b>9.3 Discussion of the Process of Learning Assignment</b>	<b>184</b>
9.3.1 Epistemological Development in the Student.....	185
9.3.2 Students Confidence in Learning.....	186
9.3.3 Student Perceptions of Learning and Understanding.....	186
9.3.4 The Implications for Pedagogy and Student Learning Experiences .....	187
9.3.5 Assessment.....	188
9.3.6 Mature Students' Transitions to College.....	188
9.3.7 Conception of Learning and the Process of Learning.....	189
<b>9.4 Teaching the Process of Learning - Syntax or Semantic?</b>	<b>192</b>
<b>10. Conclusions</b>	<b>195</b>
10.1 Introduction	195
10.2 Contribution of this thesis to Student Learning in Higher Education	196
10.2.1 Confidence in Learning.....	196
10.2.2 Benefits for Students from Participating in the Process of Learning .....	197
10.3 Teaching the Process of Learning - Syntax or Semantic?	200
10.4 Validity of Findings	203
10.5 Recommendations for Future Research	204
<b>11. Bibliography</b>	<b>207</b>
<b>12. Appendices</b>	<b>216</b>

**Please note additional sections:**

<b>10.6 Recommendations for Teachers</b>	<b>206</b>
<b>10.7 Recent Research on Critical Thinking</b>	<b>206</b>



<b>I Aspects of the Experience of Understanding</b>	<b>216</b>
<b>II Forms of Understanding</b>	<b>217</b>
<b>III Student Interview Details</b>	<b>218</b>
<b>IV Interviews with Design and Media Management staff</b>	<b>219</b>
<b>V Process of Learning Outline</b>	<b>220</b>
<b>VI Personal Development Outline</b>	<b>224</b>
<b>VII Process of Learning Assignment</b>	<b>228</b>
<b>VIII Attendance Rates</b>	<b>231</b>
<b>IX Work Collected During the Process of Learning</b>	<b>232</b>
<b>X Data Constructed in Session 1 of the Process of Learning</b>	<b>233</b>
<b>XI Grades Awarded for the Process of Learning Assignment, 1993</b>	<b>238</b>
<b>XII Analysis of the Process of Learning Assignment</b>	<b>239</b>
<b>XIII Interviews Conducted in June/July 1993</b>	<b>246</b>
<b>XIV Interview Conducted with Ella the Participant Observer</b>	<b>247</b>

# **1. Introduction to Thesis**

## **1.1 Alms of this research**

The aim of this research was to evaluate the potential of an educational programme entitled the *Process of Learning* in developing students' critical thinking skills in learning in their first year of studies. The students were attending a University in London, studying in the Social Sciences and on a Design and Media Management course. That course aims to develop the critical thinking abilities of the students, by encouraging them to reflect upon both their experiences of learning activities as well as the critical thinking skills that they use in their first year of studies.

These experiences of epistemology or thinking skills used examples drawn from the courses<sup>1</sup>, and were therefore based upon content that students were familiar with. As the teacher, I encouraged and facilitated awareness of these skills to the students in their first year learning. I also encouraged them to explore how they might recognise and apply these skills both to their studies and to situations outside of college. The question central to this thesis is whether teaching such general thinking skills is meaningful and beneficial to the first year student. Some educators argue that such courses are too abstract for the student. They propose instead that there should be changes to teaching methods within the discipline. This debate on the utility of teaching critical thinking skills is discussed in Chapter 2.

Students were also encouraged to reflect upon other learning experiences in their first year studies such as how they learn in groups. From this I investigated whether this reflection led to improved learning outcomes for students. Learning outcomes are explained in Chapter 3 wherein I describe a theoretical framework and conceptualisation of student learning in higher education. This framework is used to evaluate the findings from this research.

The research was longitudinal, taking place over the second semester of the academic year. It explored the learning experiences of a class of first year students in depth. It was intended that such an approach would inform practice both at the institution where the research took place as well as for educational researchers. The findings of this research are presented by describing the student's perspective and also the teacher as researcher's perspective of implementing the *Process of Learning* into the first year curriculum.

---

<sup>1</sup> These skills were taught to students on two disciplines - Design and Media Management and Psychology in the Community. Both thinking skills courses were identical but drew upon examples from their specific courses.



## **1.2 Focus of this Research**

The question central to this thesis, asks whether engaging first year students in reflecting upon how they learn leads to greater understanding of the course concepts by the student as well as increased critical involvement in their learning. Specifically I examine learning in terms of the students' experiences of using critical thinking skills and learning activities in first year.

This engagement takes place through the implementation of a formal educational programme - the *Process of Learning* - and it is evaluated and described through the student learning framework discussed in Chapter 3. It looks at factors in the learning environment that may have an important influence on the students' learning experience in college. For example, consideration is given to: teaching methods; to the pressures of assessment coming from different parts of the course; to the ability of critical thinking (discussed in Chapter 2) to deal with complex issues; to the students' possible resistance to 'change', and how teaching critical reflection might be developed over the 3-4 years of an undergraduate degree.

## **1.3 Overview of the Process of Learning and Personal Development**

This educational programme, the *Process of Learning* was presented to students on two separate degree courses: a B.Sc. Psychology in the Community degree, year one, and a Design and Media Management degree, year one also. Both courses were implemented at Thames Valley University. Pragmatics played a key role, with a considerable degree of negotiation being carried out by specific members of staff on my behalf, so that the *Process of Learning* could be implemented. This doctoral research deals with and evaluates the programme implemented with first year students on the Design and Media Management course.

### **1.3.1 The B.Sc. Psychology in the Community Degree**

On this degree course the educational programme that I implemented was entitled *Personal Development* (see Appendix VI). The B.Sc. Psychology in the Community degree was unique in many respects for the time (1992/1993) placing particular emphasis on applying psychology in the community. It was largely student centred, meaning that students were encouraged to take a greater responsibility for their learning. Students were required to provide a portfolio of their assessed work at the end of the academic year. There was also



conventional assessment with students having to complete exams at the end of the year. The ratio between assessed and portfolio work was 1:1.

The B. Sc. Psychology in the Community degree began in 1991 with its first intake of students. There were four modules on the first year Psychology in the Community degree course as well as an ancillary unit. *Personal Development* continued on from a first semester course called Study Skills. On this course I taught on my own. There were 75 first year students. They were taught in groups of 15 over the second semester, with 5 separate groups in all. Each group received 6 one hour sessions on the *Personal Development* course. My course was not assessed. This was an important consideration since on an already heavily assessed degree course it was likely that students would not attend my course having realised that it would not affect their grade. Therefore despite potential benefits from the course for students, instrumental concerns inevitably led to dropout by students. I was informed by the teacher on the study skills course which is linked with the *Personal Development* course, that his course was 'consumer led'. I realised that for students to experience any benefit from the course, it would be necessary for them to have attended all or close to six sessions. For this reason I sought access to implementing the course on a second degree course, the Design and Media Management degree.

### 1.3.2 The Design and Media Management Degree

The title of the course being taught in the second semester was Human Resource Control. It was a continuation from a first semester compulsory course called Human Resource Management. It was within this module that I implemented the educational programme which is central to this doctoral research - the *Process of Learning*.

Human Resource Control was one module of a multi disciplinary degree that combined art and design with psychology, management theory, statistics and economics. Human Resource Management (and Control) examined theories of conceptualising the individual and groups, theories of decision making, and individual differences. Unlike the *Personal Development* course, it was assessed. Assessment consisted of students presenting their work at the end of the academic year in the form of a portfolio. The portfolio reflected the collective assignments that they carried out during the year.

As this was also an optional course, I initially awaited information on the number of students that had chosen to take this module. They had the option of taking modules in second year instead or else other modules in their first year. I reasoned that should there be sufficient intake, then this would prove worthwhile to teach on, since the students were

assessed thereby ensuring almost complete attendance. It would also be easier to have personal access to them for interviewing afterwards concerning their experiences of the *Process of Learning* course. I found it encouraging that 25 students chose this course.

I collaborated with two other members of staff, who were quite pleased to have me sit in on their first semester classes in Human Resource Management as a participant observer. This helped me in getting a feel for the atmosphere of the faculty and an opportunity to meet the students.

#### **1.4 Aims of Both Educational Programmes<sup>2</sup>**

Both educational programmes - the *Process of Learning* and *Personal Development* - encouraged the student to reflect upon their first year course thinking skills, upon course issues and course concepts and to also reflect upon how they learn. Discussion amongst students was based upon these issues to determine whether a greater awareness of these skills and concepts led to a deep approach to learning by the student.

The content of these courses was preceded and determined by a review and appraisal of the literature concerned with critical thinking and thinking skills in Chapter 2, and by the research in student learning in Chapter 3. The courses were focused upon the course material within the two degree programmes in first year. I became knowledgeable of the (Degree) course material through interviews with staff and students on Design and Media Management, and these findings are described in Chapter 6.

Evaluation of the *Process of Learning* explored whether such a programme led to a qualitatively (explained in Chapter 3) improved understanding of the course materials and concepts for the students. They explored topics in the educational programmes using individual and group learning activities. The learning activities were intended to encourage exploration of the first year course subjects, by shifting responsibility for learning in the direction of the student, with the teacher assuming the role of facilitator.

#### **1.5 Negotiating Access to the College - Important Considerations**

The *Process of Learning* was designed and implemented with two different groups of students. The course was essentially the same in structure and content for both degree courses, being named *Personal Development* on the Psychology in the Community degree course. While preferring to concentrate and direct my energies with one course, the nature

---

<sup>2</sup> The *Process of Learning* and *Personal Development*



of the research and of the political and social climate at the college in question required taking on extra work as an insurance factor.

One course should have been enough to evaluate the effectiveness of the educational programme that I designed, implemented and evaluated. However there were problems. For example there were problems with conducting preliminary interviews with first year psychology students. Some members of staff got the impression that I was in some manner attempting to evaluate them, and that this evaluation gathered from students might be used against them. This occurred at a time when staff were concerned that their jobs were under threat following new teaching initiatives<sup>1</sup> that were being implemented by new management, as well as the prevailing political trend by the government which was towards more objective accountability in teaching. As a result the interviews had to be called off. I was not given the opportunity to explain myself at a staff meeting in order to reassure staff that the research would not affect their livelihood, so I therefore had to cancel the interviews.

There is a need as a participant researcher - when attempting to work within an organisation, to ingratiate oneself somewhat with staff at different levels, so that you are more easily accepted. This is an important point as it influenced the early stages of the research as well as participation from staff. Once staff get to meet the researcher they relax and accept him or her. Certainly the early stages of this research required a lot of contact with all the initiative being shown by the researcher and this continued for the duration of the research. Only with the beginning of the academic year (1992/1993) was it finally possible to get formal acceptance to implement the programme, which was conducted over the second semester (February - June 1993).

## **1.6    *Structure of this Thesis***

In Chapter 2, I present the issues of debate which I intend to address in this thesis. The rationale for this thesis focuses upon improving understanding of the perceived inability of many students to think critically in their learning in Higher Education. Proposals are made by educators on how to resolve this problem and thereby improve the quality of learning for students in Higher Education. While educators may agree (as will be shown) on the goals of education at third level institutions, they disagree with the path that ought to be followed. In the context of this research, they agree/disagree on what the benefits of teaching critical thinking may be in achieving these goals. This thesis deals with this issue.

---

<sup>1</sup> New management programs were and still are advocating a shift towards the University becoming a learning centre with less reliance upon teaching staff in June 1992



In Chapter 3, I present a theoretical framework which describes students' experiences of learning in Higher Education. It also discusses the importance of appraising the effect of the learning environment upon students' approaches to study. This framework is used to describe how students perceived and interacted with the *Process of Learning*. (These findings are reported in Chapters 6-9).

Methodological consideration important to this research are presented in chapter 4. The two educational programmes were designed, implemented and evaluated by myself. It was therefore necessary to choose methods of research that allowed me to both implement and evaluate the educational programmes. In this chapter, the research methods and their epistemological rationale are described. This is followed by a justification for the choice of Action Research methodology that I applied to this endeavour. I designed the learning activities for the *Process of Learning*, facilitated the learning workshops with the students and evaluated this practice as teacher - researcher in the action research tradition.

In Chapter 5, the key issues arising from the theoretical review are summarised, and this sets the stage for the following Chapters (6 - 10) which describe the research findings. An outline of the *Process of Learning* is presented here. Chapter 6 describes and analyses feedback provided by both staff and first year students on the Design and Media Management degree course, prior to implementation of the *Process of Learning*. These findings informed the design of the two educational programmes.

In Chapter 7, I present and discuss the teaching of the *Process of Learning* through the four Sessions of which it was comprised. This description and analysis, termed triangulation, is based upon feedback from the students, the teacher (myself) and from Ella, a lecturer at Thames Valley University who agreed to take part as a participant observer. Chapter 8 describes the interviews that were conducted (and then transcribed) with students that had taken part on the *Process of Learning*. Students interviewed were chosen to represent a broad range of ability in terms of the *Process of Learning* assignment, from Pass to First Class mark. Their comments provided very helpful insights into the problems and benefits of implementing critical thinking courses into the curriculum. Their thoughts and feelings are described and analysed here.

The assignment for the *Process of Learning* is analysed and interpreted with reference to the central research questions of this thesis in chapter 9. The assignments of eight students representing a range of abilities - in terms of performance and awards on this assignment - are transcribed, presented and analysed here. In Chapter 10, I bring together the conclusions drawn from the findings reported in Chapters 6 - 9 with a discussion on the potential for implementing critical thinking courses into the curriculum in Higher Education. Conclusions are drawn based upon cross referencing of findings in chapters 6-



9. Recommendations are made on how critical thinking skills courses can be effectively implemented, mindful of several important caveats. This chapter concludes with guidelines for future research projects aimed at extending our understanding of teaching these course in the United Kingdom.

### **1.7 Central Issues in this Doctoral Research**

This thesis asks whether engaging the student in their first year of studies in Higher Education — in reflecting upon *how* they learn, both in terms of their experiences of critical thinking skills and learning activities — can lead to greater understanding of course concepts as well as a more critical involvement in their learning.

My interest in carrying out this research began during my own undergraduate studies. I studied psychology as an undergraduate and therefore studied many different areas of this discipline such as personality psychology and statistics. During my studies I became aware of my ability to understand certain subjects in depth than others. I found that I enjoyed those subjects far greater where I was able to understand the many concepts and their relation to each other as well as their application to real life settings such as in the work place. This enjoyment partly stemmed from personal interest in certain subjects over others. However I became aware that other factors were also involved. These included the teaching methods being used, the assessment procedures, workload and time constraints. I began to realise that certain subjects could be more enjoyable and easier to learn if there were changes made to how they were taught. For example, in statistics I was interested in how the mathematical concepts could be taught so as to lead to a more intuitive understanding of the statistical techniques. To this end I carried out a project exploring effective teaching methods for statistics as my final year project.

In conducting my PhD research I was motivated to explore how effective teaching methods could lead to effective learning outcomes for students across different faculties in Higher Education. In specific terms I became very interested in the debate on the validity of teaching general thinking skills courses to students with a view to improving the quality of their learning. This debate occurred largely in the United States and formed part of a larger debate which addresses the challenge of how best to improve the abilities of students to think more critically about the subjects that they learn. It was widely acknowledged at the time that many students were leaving college without a critical understanding of the subjects that they had studied. They were therefore less likely to apply what they had learnt effectively to their workplace and personal lives. So, while all educators agreed that students were not being critical in their thinking, they disagreed on the route that ought to be followed to achieve greater criticality.

I was motivated to explore whether teaching critical thinking skills to students in their first year of studies in the United Kingdom would lead to more critical thinkers. My review of practice in the US and my own experiences of learning at University led me to believe that such courses could effectively improve the quality of learning for students in the United Kingdom. In order to determine the efficacy of this conclusion I needed to design and implement a critical thinking course for students here in the United Kingdom. The evaluation of this course led me to conclude that such courses are beneficial to students in the United Kingdom but only if certain structures are in place in the learning environment. It also requires certain responsibilities to be met by students in their learning and staff in their teaching.



## **2. Critical Thinking and its Relation to Pedagogy in Higher Education**

### **2.1 Introduction**

The programme entitled the *Process of Learning*, aimed to encourage students to critically reflect upon the processes of reasoning and learning activities contained and used within their experiences of learning in first year. The motivation for this thesis, was to determine whether the quality of the students' learning at a college in the United Kingdom was improved by introducing this course into the curriculum, alongside the other modules being studied by the students in their first year. This course was essentially an introductory course in critical thinking for students in their first year of studies based upon the work of educators in the United States (US). At the time of this research the majority of Critical Thinking courses were being designed, implemented and their merits debated in the US. The theoretical background to critical thinking courses had progressed most significantly also in the US and is reviewed in this chapter.

This thesis aimed to evaluate the benefits of teaching critical thinking as a separate course to first year students in the United Kingdom by responding to the theoretical and practical concerns raised mainly by experiences in the US. The framework used to evaluate these responses is discussed in chapter 4. The research, design and implementation of the course attempted to address issues of concern to practitioners and educators in higher education. These concerns or debate focus centrally on one key issue namely how students can be encouraged to reflect upon reasoning processes and what improvements does this bring for the student in the quality of their learning and understanding.

In this chapter I describe these concerns, that focus upon the inability of many students to think or reason more critically and apply what they learn at college to their personal and professional lives. There are possible explanations for this which I will outline. An holistic definition of critical thinking is outlined followed by examples of innovations that have been implemented by practitioners in higher education. I will conclude this section by discussing the nature of the debate concerning the value of engaging students in reflecting upon how they learn and what arguably constitutes good reasoning. It is from this debate that the questions central to this thesis are drawn.

### **2.2 Definition of Critical Thinking and Courses in Higher Education**

Paul and Nosich (1991) provide a comprehensive description of critical thinking. Firstly,

they cite its importance for effective learning (in research over the previous ten years), of the need for students to reason within their own discipline, to

...reason out all basic concepts and understandings, to reason to all basic conclusions and solutions, and to reason through and across the curriculum. (Paul and Nosich, 1991: 2)

Secondly they propose a need to formalise and describe in a rigorous manner the nature of critical thinking so that it can be utilised across disciplines and colleges.

What then is critical thinking? The literature abounds (De Nitto and Strickland, 1987; Kemmis, 1985; Seiger, 1984 for examples) with attempts at defining this concept. The importance of developing reasoning in students permeates the curriculum. According to Kemmis (1985) reflection upon thinking and 'what we do' is a

... practice which expresses our power to reconstitute social life by the way we participate in communication, decision-making and social action. (Kemmis, 1985: 149)

I shall examine the comprehensive description provided by Paul and Nosich (1991) who describe critical thinking as,

... the intellectually disciplined process of actively and skilfully conceptualising, applying, analysing, synthesising or evaluating information gathered from, or generated by observation, experience, reflection, reasoning, or communication, as a guide to belief and action. (Paul and Nosich, 1991: 4)

Further, critical thinking is seen as being 'based on universal intellectual values that transcend subject-matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness' p4. They extend the definition by pointing out that it entails,

...the examination of those structures or elements of thought implicit in all reasoning: purpose; problem, or question-at-issue; assumptions; concepts; empirical grounding; inferences; implications and consequences; objections from alternative viewpoints, and frame of reference. (Paul and Nosich, 1991: 4)

## **2.3 Background to the Critical Thinking Movement**

In this educational program I focused upon students at college level. However it is useful



to understand the work of key educators which influenced the development of thinking skills courses with younger age groups.

Binet is seen as the forerunner of modern thinking skills programmes, Mays (1985):

It was clear to him [Binet] that what such children needed, to use his own words, was to learn to learn. Binet therefore proposed a system of training which he called mental orthopaedics, by analogy with physical orthopaedics. This involved therapeutic exercises for strengthening attention, memory, perception, invention, analysis, judgement and will. (Mays, 1985: 150)

Binet attached importance to motivation, believing that adequate motivation in the learner would go a long way in the development of intellectual skills. Mays paid attention to the work done by practitioners that have hugely influenced this field, proclaiming the work of Binet as the direct forerunner of such thinking skills programmes. He describes and appraises the work of three of these practitioners: Feuerstein, de Bono, and Lipman. Their programmes are directed largely towards children and adolescents, and they claim to improve the intellectual skills which enter into any cognitive task.

As a practitioner and theoretician de Bono's allegiance lies with the innate theorists. Therefore he believes that intelligence is fixed genetically but that it can be receive fine tuning through the implementation of thinking skills courses. Likening intelligence to a car, de Bono proposed that the engine is fixed but that the acceleration is under the user's control. His method for teaching thinking skills is very pragmatic: he lists the skills that need to be developed and describes the methods required for improving them. In a sense he seems to be advocating that you make the most of your potential.

According to Mays his work lacks theoretical strength and that he is over simplistic with his view of the mind. Some of the skills that he enumerates are worth listing in order to 'get a feel' for the type of criteria that are the subject matter of thinking skills courses:

- the importance of taking other people's point of view into account
- to become aware of the dynamics of decision making (objectives, consequences and alternatives)
- the importance of thinking ahead
- lateral thinking which suggests looking at problems in novel ways that move away as he describes from the narrow and limiting logical, scientific approach (de Bono, 1977)
- to engage in value judgements with respect to situations and events with which they take issue

Feuerstein (ibid.) is interested similarly in learning skills and how children:

- handle ideas
- make decisions
- learn to think and solve problems
- form images in class
- make mental representations
- perform analogical reasoning
- make judgements about concepts

The exercises also teach strategies, rule following, and forward planning. He attempts to stimulate them with his paper and pencil exercises. Feuerstein describes a technique called bridging whereby the pupil learns to make concrete applications of the principles acquired through the exercises with the help of the teacher. He describes the mediated learning experience whereby the involvement of the adult comes into play in developing the child's basic activities. The adult here would help the child to learn to anticipate events and adapt to new situations.

Unlike Lipman (in Mays, 1985) Feuerstein places greater emphasis on numerical, logical and geometrical content compared with Lipman who emphasises literary and linguistic content.

Feuerstein recognises the importance of culture and the environment on the development of the child's intellectual abilities. He stresses the importance of the social learning environment. Intelligence tests he says do not measure processes but rather the products of intellect. Quoted in Mays he says:

Intelligence is considered a dynamic self-regulating process that is responsive to external environmental intervention (Mays, 1985: 155)

Feuerstein points out that you may very well teach the student the necessary skills of learning but it does not necessarily imply that you have developed an understanding of values and their place within moral, social and aesthetic domains.

Lipman places the emphasis on learning higher order thinking skills through the context of language, unlike Feuerstein who argues that the emphasis should be on teaching through logical and numerical structures. Lipman emphasises the skills that are inherent in the child's everyday conversation, in a sense to make the child more aware of these skills through dialogic enquiry and consequently to develop them. The emphasis is on language acquisition from the start paying attention to the forms of reasoning implicit already in the



child's language. Attention is given to developing or understanding the following:

- ambiguity in debate
- relational concepts
- abstract notions such as causality, time, space, number, class and group

Novels are provided as the basis of the discussion, namely that the characters, events, issues and relations become the basis of the discussion. Teaching informal logic, he then goes on to develop it into other forms of reasoning that people use such as social, moral, aesthetic and scientific. Further considerations he includes are the role of the teacher on his or her courses, the role of discussion, the importance of peer feedback and self esteem.

The tools that Lipman uses for his course are formal logic and the rules of reasoning. It is not enough though on its own - Lipman states that you will not be a better person just by learning these alone that it is also necessary to learn them within the framework of a social grouping, with others trying it out at the same time. The course he advocates can be taught he says to students between the ages of six and eighteen. Lipman unlike Feuerstein is concerned more with normal children and is less remedial therefore in nature. Both believe that there is much potential for growth amongst children, and they attempt to improve the child's ability to use classifications, relations, syllogistic reasoning and hypothetico-deductive arguments as well as spatial, temporal and causal categories, (Mays, 1985).

Criticisms levelled against the methods of Lipman include that you cannot teach general thinking skills yet Lipman has argued that you can. Mays (1985) states that he has evidence that he taught 8 year olds the basics of logic. Also critics agree that the philosophy that Lipman teaches is narrow in its scope, by relying on the Socratic method of inquiry yet disregarding the work of other philosophers such as Kant. Another objection concerns the issue of validity, namely how do you know the specific effect that the course had upon the student. De Bono (ibid.; also De Bono, 1977) criticises Lipman arguing that there is no need for an extra course that teaches thinking skills in a subversive way on an already overburdened curriculum. The problem rests instead with the teacher in question who should be responsible for the concepts and skills if they form a part of his or her course.

This issues stemming from the above research and which relate to Higher Education are as follows:

- Can 'general thinking skills courses' be taught to students at college?
- Can the learning outcomes of such courses be measured directly?
- Do such courses simply overburden the curriculum or do they improve the

students ability to think critically?

## **2.4 Pedagogical Problems and their Effects on Student Learning**

In introducing the concept of critical thinking above, I need now to discuss its impact and implementation upon Higher Education.

What are the priorities then that should be addressed in higher education if effective learning is to take place for the student and is teaching critical thinking one of these priorities? Many commentators are in agreement as to the broad goals that we ought to be achieving with our students in higher education, but differ fundamentally in terms of the route that ought to be followed. One of the key goals on which there is consensus amongst the following educators in this chapter, is that the *processes of reasoning* as well as the products must be learnt by the student. In other words students should spend more time, and give greater priority to learning *how to reason* in the subjects that they study in order to think more critically about their subject and how it relates to the world.

However the reality is that the processes of reasoning are being neglected in higher education as evidenced by Radencich and Schumm (1984) for example who describe the,

... outcry over the problems which students display in thinking, problem-solving, and inferential skills. (Radencich and Schumm, 1984: 43)

De Nitto and Strickland (1987) discuss the concern felt in the US that students are not being taught to think critically, but rather to conform and learn facts (also Glaser, 1984; Pierce et al, 1988). Basadur et al (1990) point out that,

Our formal educational system and culture do not teach or nurture such cognitive skills. Rather, they do much to suppress them. (Basadur et al., 1990: 23)

Holmes and Ammon (1985; also similarly Heinrichs and LaBranche (1986)) having surveyed the research on this issue lend further support to this: they state that,

Research has indicated that teachers are usually more concerned with having students master facts than improve their comprehension abilities. (Holmes and Ammon, 1985: 366)

If we look for reasons to explain the apparently poor ability of students to think critically we can see that there are many factors in the environment that can adversely effect such goals. Attias (1991) suggests that problems in developing a 'critical pedagogy' (p.4), are



quite deeply rooted within the educational institutions themselves. The perceptions and roles that students and teachers have of themselves within the classroom stem from a recurring ideology which blocks or prevents the student from engaging in a critical approach to learning. For example the emphasis that is placed upon getting good grades in college being tantamount to success and progress.

Gibson (1986) argues that educationists are merely upholding the status quo in society through their teaching methods. They are, he says, maintaining the power structures in place. He asks whether education can become emancipatory if this status quo is maintained (also Evans and Nation, 1989). Morgan (1983) discusses the consequences of this for the teacher. The teacher must shift from the didactic to discursive and pay more attention to the process of learning.

McPeck (1990) cites ineffective teaching as the main problem and not the design of the curriculum in teaching college students. Across the range of educational experiences there are examples of educators and practitioners emphasising the need for students to learn to think critically. To concentrate only on learning as the transmission of facts, to see learning as getting it right or wrong only, to ignore discovery or to raise questions:

... inhibits free discussion, critical thought and the drawing of inferences. (Feiertag and Chernoff, 1987: 252)

Practical difficulties arise in the classroom (such as inadequate resources) when trying to engage students in critical thinking. Moeller (1985) for example importantly describes his experiences as a practitioner teaching psychology students in higher education, in an attempt to 'help them improve their thinking and oral communication skills' (p207). He tried to do this through the use of classroom debate and in doing so he became aware of having to deal with student anxiety, time pressure and grading to name a few.

## ***2.5 Criteria Necessary for a Comprehensive and Rigorous Definition of Critical Thinking***

I will continue here in this section with the framework outlined by Paul and Nosich and incorporate the comments of other writers where appropriate. A definition for critical thinking skills recognises that

... they are generalisable, that there is a range of flexible skills and abilities that can be used in a wide variety of disciplines, situations, and contexts. (Paul and Nosich, 1991: 5)

Such a definition needs to be able to distinguish between disciplines in terms of the epistemic nuances prevailing between them while at the same time recognising the common structural features across disciplines. By 'epistemic nuances' is meant the structures and patterns of thought particular to each subject area. To think critically they argue is central to other educational goals, such as becoming more self confident, a better writer and reader. Strongly emphasised is the transferability of skills across knowledge. The critical thinker should be able to transfer his/her abilities to the workplace.

Critical thinking respects cultural diversity, and is constructive as well as being involved in assessing thoughts and arguments already formed (ibid.). It is not simply a set of tools for detecting errors in our thinking, it is not just about examining the purpose, implications, assumptions, point of view of the writer or communicator. According to Paul and Nosich it must encompass the individual in society as a consumer or citizen otherwise s/he is 'intellectually disarmed'.

At college level they emphasise the need for students to move away from content reproduction to being able to critically assess and handle information and ideas, arguments and other person's points of view. In any comprehensive definition the students at college level should also be able to utilise these abilities outside the University. That is such skills that are also valued by,

... practitioners of the academic disciplines, by responsible leaders of government, of the professions, of business, by citizens interested in their environmental, physical and economic welfare. In all such areas what is needed are ways to adapt to rapidly changing knowledge, to recognise problems and see their implications before they become acute, to formulate approaches to their solution that recognise legitimately different points of view, to draw reasonable conclusions about what to do. (Paul and Nosich, 1991: 8)

A formal, rigorous and substantive concept of critical thinking that meets the criteria described above by Paul and Nosich is needed. Otherwise they predict problems with a 'theoretically superficial concept of critical thinking' which are (i) misuse of critical thinking concepts because of misleading, vague or inaccurate definition; (ii) that critical thinking becomes oversimplified as a concept and (iii) that this in turn would lead to an unhelpful strategy for assessment of critical thinking in teaching and in testing.

## **2.6    *The Four Domains of Critical Thinking***

In addition to the criteria above the concept is extended by what Paul and Nosich call the four component domains of critical thinking which are - the elements of thought,



macroabilities, affective traits of mind and intellectual standards. A brief description of each will follow.

The elements of thought are,

... the basic building blocks of thinking, essential dimensions of reasoning whenever and wherever it occurs. (Paul and Nosich, 1991: 8)

and they deal with the gathering, conceptualising, applying, synthesising and evaluation of information such as the need in reasoning to distinguish the purpose or goal of an author's argument.

Macroabilities are 'skills more associated with elements of thought' that are grouped into 'larger-domained abilities' such as questioning deeply, developing one's perspective and analysing or evaluating arguments.

Affective dimensions according to Paul and Nosich are also necessary for our definition of critical thinking along with the elements of thought and macroabilities. There is a need for 'certain attitudes, dispositions, passions, traits of mind', such as intellectual perseverance, fair-mindedness, and confidence in reason.

Finally they propose the importance of having intellectual standards that apply to thinking in every subject. They believe in making explicit these standards for the student so that they can become aware of what constitutes good critical thinking.

So far I have defined the nature of critical thinking based upon the work of Paul and Nosich as their work is at the forefront of the discipline. Their paper provides a holistic description of critical thinking as a concept based upon a review of the research. The work of other educators follows and discusses elements of their description as applied in teaching practice by educators chiefly in the US.

Blai (1990) supports the rationale for teaching critical thinking by stating that without it the student would be 'flawed in reasoning' (p295). According to him it can be improved by the student being involved in the social and intellectual experience of college. He describes the following aspects of critical thinking as constituting higher order thinking skills:

- inference
- recognition of assumptions
- deduction
- interpretation

- the evaluation of arguments (also Redding, 1990)

Blanchard (1984) prioritises 'skills of inquiry, interpretation, and application...' p173. In teaching critical thinking he suggests that one must be flexible according to the teaching situation or context.

Support for involving students in critical thinking are many and diverse in subject scope. Critical thinking is cited by many educators as enabling the student to relate knowledge and ideas more effectively to their personal lives as well as their life in the community. Hicks and Southey (1990), who in reviewing the findings from the United Kingdom and the United States concerning managerial competencies describe the value for the business management student in gaining,

... competence in analytical or critical thinking as an essential component of successful managerial performance. (Hicks and Southey, 1990: 74)

Furthermore they justify the importance in the student developing his/her reasoning abilities in order to 'acquire skills sooner and more efficiently, p76, (also Howard and Engelhardt, 1984 who describe innovations in teaching psychology). The importance of student active involvement with concepts and ideas is cited by Berman (1984; also Limerick, 1990; also Schlichter, 1986). She highlights the importance of lifelong learning for the individual and furthermore she argues that

... in process type curricula will be opportunities to learn skills desired by the local citizen. (Berman, 1984: 105)

The teaching of content rather than understanding may contribute to the student being unable to relate concepts to familiar things (Carlisle, 1985).

These examples illustrate the diversity of critical thinking courses in existence. What they all have in common is that they reflect the four component domains of critical thinking - the elements of thought, macroabilities, affective traits of mind and intellectual standards - to differing degrees. They also illustrate the large range of skills involved which would extend beyond the capabilities of a single course.

## **2.7 Class Examples of Critical Thinking Innovations**

Programmes attempting to engage the student in critical thinking can be found across the range of educational settings. While Paul and Nosich provide a comprehensive theoretical



framework of what constitutes critical thinking we see in the following that innovations are determined by many factors on the ground. Firstly one becomes immediately aware of the variety of educational programs (especially in the US) and methods for encouraging critical thinking in students. This recognises that there may well be practical, pedagogical or epistemological reasons for this variation. For example the particular abilities of students or time constraints influence the design of a programme.

According to Kemler (1990) programs aimed at enhancing thinking and reasoning skills vary because the goals vary from programme to programme according to instructional needs. The remainder of this section describes a selection of such programs in brief and highlights some of the challenges facing such innovations. There is an extensive list of abilities that are within the scope of the critical thinker. Such a list is overwhelming and difficult to prioritise. He proposes that,

... the selection of a programme to enhance thinking and reasoning skills will depend upon: 1) the strategic choice of goals to be achieved and 2) the tactical choice of techniques and methods designed to overcome the impediments to critical thinking in a specific context. (Kemler, 1990: 5)

Programmes fall into two categories which are either linked with a specific course or traditional discipline, and those courses that may be described as general purpose courses. General purpose courses cannot,

... provide much in the way of background knowledge and content specific problem solving skills needed to do well in a particular discipline. Positive transfer to other courses is thus severely limited. (Kemler, 1990: 5-6)

Only when generic courses use examples from a range of disciplines and limit their number of objectives will they improve transfer (Kemler, 1990). In contrast he states that

... when a thinking skills programme is incorporated into a regular content-specific course, the impact is much more dramatic within that discipline. (Kemler, 1990: 6)

There are as many methods of facilitating critical thinking as there are innovations. For example, the use of debate in class or choosing subjects that are controversial is described by educators who also emphasise that critical thinking is a social activity (Walter, 1991; Anderson and Pigford, 1988).

Moeller (1985) discusses using critical thinking with psychology students. He describes the practical difficulties that he encountered such as dealing with initial student anxiety, having too little time, and recognising problems with grading. Implementing a course on

critical thinking does not only cause anxiety for students - staff may also find it difficult to change from a safe situation to one of uncertainty. Hauser (1991) discusses how dealing with uncertainties can be difficult for teachers, in terms of encouraging more open discourse in subject disciplines. Further in examining the role of group work within the classroom as an aid to developing reasoning they emphasise students being encouraged to cooperate through discussion and in their assignments.

North (1990) discusses the importance of critical thinking in writing, emphasising the importance of reflexivity in writing. Redding (1990) argues that the development of skills in problem solving for trainees is primarily determined by practice and experience. Anderson and Garrison (1995) discuss the importance of teaching critical thinking to students enrolled on distance education courses. Students need the opportunities to develop their ability to think critically. It is not enough they argue for students to acquire information at a distance (i.e. on correspondence courses), their learning must also incorporate critical reflection and discourse in order to make their learning more meaningful. Their research findings support the need for two way communications in distance learning. Such interaction can be achieved quite easily they propose, for example through the medium of audio teleconferences:

The results of this investigation show that supportive learning communities can be created, at a distance, through the use of relatively low level technology - audio teleconferences. The opportunity for sustained communications between and among teacher and learners is crucial to the development of critical communities of inquiry ... Interactive audio teleconferencing sessions, developed under a community of learning model, can support university students in the development of meaningful approaches to learning and critical thinking. (Anderson and Garrison, 1995: 197-198)

Norton and Crowley (1995; also Basadur et al, 1990) integrated a learning to learn programme with first year psychology degree students and concluded that it is crucial that such courses become a core (not experimental) part of the degree. They also cited the importance of seeking support from other members of staff and in persuading them that such courses should not be perceived purely as being remedial courses. Instead staff should be made aware (as well as students in some cases!) that such courses improve the ability of each student to learn:

If lecturers can be persuaded that such change is *developmental*, that is students move from novices to experts in learning ... rather than seeing learning programmes as remedial, then maybe learning-to-learn programmes would be accepted as an integral part of the curriculum. (Norton and Crowley, 1995: 327)



So far I have described the many factors and challenges to be considered by educators and practitioners in designing, facilitating and appraising critical reflection innovations for students in higher educational settings. In the following section I will examine the wider, more concerted debate as to whether such reasoning skills should be taught at all.

## **2.8 *Debate In Critical Thinking In Higher Education***

McPeck (1990) argues that to teach thinking skills as a separate course is unwarranted. I will discuss the points made by McPeck, acknowledged as one of the foremost critics of the teaching of critical thinking. The first argument he places against the teaching of such skills is that of definition. According to McPeck, the term reasoning ability is too broad and does not really refer to a specific phenomena. Their range is so broad and the dynamics and context so differentiated that

... all that these activities have in common is that they are all done by conscious beings and require reasoning of some sort. (McPeck, 1990: 4)

He suggests that such methods as argument analysis do not relate adequately to the day to day decisions and tasks that we have to face (argument analysis engages the student in listing the skills involved in debate and deciding upon those qualities which make one point of view more convincing than another). It is always a reconstruction of the past and not concerned with truth but with validity. In other words he believes that it is not rooted enough in real world situations such as politics issues as read in the newspapers. Therefore as a method for teaching effective reasoning he argues that it is inadequate.

If a student decides to engage in inquiry into public issues then s/he has to rely on information presented in a certain way. An example of a public issue could be the debate on rehabilitation versus punishment for individuals that transgress the law. For McPeck the problem becomes one of information. He argues that such everyday problems are not as ordinary as one might think. When you start to look at them you realise that they are indeed very complex. Having formal or informal logic does not assist you in understanding the soundness of the arguments. He argues that you need instead to have the requisite information first. If it is a question of economics for instance, then without the requisite information of the principles of economics you cannot really appreciate the complexity of the arguments. The information itself needs to be understood and the manner in which it comes to you. It is very hard to find information on any topic that is unbiased. The emphasis instead should be upon teaching 'understanding information'.

He argues fundamentally against the teaching of general skills across knowledge domains

instead of teaching a knowledge and information approach:

Giving people very general principles for solving problems, even with extensive training in them, is like giving people a language with a syntax but no semantic. It is functionally meaningless. (McPeck, 1990: 14)

He turns the pedagogical implications of the critical thinking skills approach on its head, and suggests instead that maximum transfer occurs through the knowledge and information of fields provided rather than through specificity of generalisable skills. What *is* problematic however he says, is that students are presented the knowledge and information without being critical of its (i.e. knowledge) methods and facts. He is advocating the teaching of a specialist area within its own knowledge domain by teaching it holistically and critically.

Just what are the ingredients of thinking? According to McPeck, thinking always has to be about something, it must have a focus. Thus you must bind thinking and critical thinking to particular subjects. Knowledge and skills required for the one activity are quite different from the knowledge and skills required for another. Skills differ across the subject disciplines and are therefore not generalisable he argues. Instead efforts should be made to improve the quality of understanding through the disciplines. He argues that the diversity of problem situations is too great to teach an all encompassing skills course. The person with the knowledge and information is better off than the person trained in specific skills. This is supported by Glaser (1984) who concludes in his treatise on the matter that domain specific knowledge is the main determinant of what we call reasoning and reasoning skills.

Advocating liberal education as the way forward McPeck (1990) stipulates that the processes of reasoning as well as the products must be learnt. While McPeck agrees with his antagonists about the importance of autonomous thinking for students, he disagrees about the route that ought to be followed. Inherent in the language of a particular subject are exclusive forms of reasoning which govern the thought in that subject. The individual comes to think and reason through language:

Our culture, or more specifically the disciplines, have developed entire networks of concepts, methods, and procedures for dealing with an enormous spectrum of life's familiar and unfamiliar problems. (McPeck, 1990: 41)

McPeck proposes that it is the manner in which we teach that causes the problem. He suggests a need to change the structure of the discipline and move from a didactic mode of presentation towards a discursive or argumentative mode. He therefore:



- refutes the existence of general skills and the proposal that standardised tests exist for measuring them
- argues that it is difficult to define such skills or processes
- indicates that one could not achieve statistical rigor in their appraisal as they are so diverse or complex

What then are the criticisms that have been levelled against arguments put forward by McPeck? Norris (1990) states that McPeck is putting forward a conceptual truth not an empirical one on the merits of teaching critical thinking and that therefore his statements lack scientific validity. The claims of McPeck are not so much derived from effective research as they are an agenda for research. Norris argues that the claims of McPeck are not sustained. He also disagrees with his views about tests stating that he has no empirical basis for stating that they are invalid.

Siegel (1990; 1989) criticises McPeck for stating that thinking must always be about X. There is no problem about thinking in general, as for instance there is no problem with the idea that the 'general activity of cycling is logically connected to any particular bicycle'p77. McPeck he argues fails to distinguish between specific acts of thinking and thinking conceived as a general type of activity:

Skills such as identifying assumptions, tracing relationships between premises and conclusions, identifying standard fallacies, and so on, do not require the identification of specific subject matters: such skills are germane to thinking in subject areas as diverse as physics, religion, and photography. (Siegel, 1990: 77)

We have seen earlier the comprehensive description by Paul and Nosich in defining critical thinking and its constituents which would appear successfully to answer the criticism put forward by McPeck that defining critical thinking is problematic. McPeck in response still argues that for example, what it means to do mathematical reasoning is logically distinct from what it means to do moral reasoning. He concurs with Siegel's observation however that the phenomenon of thinking can become the object of thinking itself. Because critical thinking does not denote a specific skill like cycling, therefore it cannot be applied to a specific context. There is no one set of skills that denotes thinking, for example Siegel's example of 'ability to recognise underlying assumptions' p97.

Many commentators talk about the need for changes in the educational process and curriculum if students are to reason more critically and creatively (Blai, 1990). Should one therefore:

- proceed with courses that encourage students to think critically or

- should we stick instead to keeping the curriculum as it is, yet shifting away from a didactic mode of teaching towards a more student centred discursive mode or
- rather than treating the challenge facing educators in this polarised manner should we move towards a new synthesis where both are incorporated?

## **2.9 Issues in Critical Thinking Responded to in this Thesis**

In chapters 6-9, I describe the course entitled the *Process of Learning* containing elements of critical thinking as defined by Paul and Nosich (1991). I facilitated this course with students studying on their first year of the Design and Media Management degree. The course encouraged the students to reflect upon certain elements of thinking that they would be introduced to in their first year curriculum and also to reflect upon how they learn in different activities. I respond to the issues raised in this chapter, through the findings from this course according to the student learning framework described in chapter 4.

To evaluate whether the teaching of the *Process of Learning* improves the quality of students' learning in higher education here in the UK I consider the following criteria in guiding the responses of this thesis. These issues have been discussed in this chapter and are summarised as follows:

### **The central question of this doctoral research:**

- Can general critical thinking skills courses such as the *Process of Learning* be taught to students side by side with their first year of studies at universities in the United Kingdom?

If they can be taught meaningfully, then what benefits occur in terms of the quality of the students' learning outcomes? Or, alternatively, are such courses too general and therefore meaningless or abstract for students as McPeck (1990) argues? Is teaching the critical understanding of information of a particular subject discipline the route that ought to be followed instead in studying the processes of reasoning?

The following ancillary questions are considered in guiding my response to the central question above:

- How has the *Process of Learning* been formalised to comprise elements of critical thinking as defined by Paul and Nosich and agreed by other educators? This includes the four domains of critical thinking - the elements of thought,



macroabilities, affective dimensions and intellectual standards.

- The goals of individual critical thinking courses vary diversely according to a range of criteria including the aims of the individual practitioner and the resources at her disposal. What were the goals of the *Process of Learning* and what were the limitations such as that of time and faculty support?
- Educators agree upon the need to teach the processes of reasoning as well as the products of reasoning. Does the teaching of critical thinking lead to more effective learning by focusing upon these processes of reasoning? What evidence can be provided from this thesis?
- There is concern that students are being taught to conform, focusing upon grades as the only measure of success in learning and that other factors in the environment detract students from thinking more critically in their studies. Does teaching critical thinking diminish these concerns? Should we instead focus our energies on encouraging a liberal education that is discursive rather than didactically taught?
- What other insights can be gained from the teaching of the *Process of Learning*? For example, how should it be integrated into the curriculum if found to be successful? Should students be encouraged to reflect upon their learning experiences in their first year of studies or does it overburden an already overloaded curriculum as McPeck (1990) argues?
- Are courses like the *Process of Learning* relevant to the ideas and concepts that the students are learning in their first year?
- Is critical thinking better placed within the disciplines reflecting the epistemic nuances of that discipline or can courses in critical reflection be taught in a more general approach?

### **3. Student Learning Theory in Higher Education - a Conceptual Framework**

#### **3.1 Introduction**

In this chapter, I present a theoretical framework describing student learning in higher education, from the learner's perspective. I evaluate the merits of using this framework for conceptualising student learning. I then use this theoretical framework in order to:

- Describe students' experiences of the *Process of Learning*
- Respond to the debate on teaching Critical Thinking courses which is the focus of this doctoral research. These issues are discussed in the previous chapter.

The impact that the educational environment has on student learning is widely cited, and many researchers now agree that certain practices and ethos promote quality learning for the student whereas others inhibit the learning experiences for the student.

What do we know about student learning in higher education? How does the student experience learning in higher education? In considering the student's learning experiences and development, his or her interactions with fellow students and staff, and his or her interaction with the environment in which learning takes place, we are dealing with a complex mosaic of interaction and development over time. This research undertaking is concerned with describing student learning experiences while recognising the importance of the interplay with the context in which learning takes place for the student. This can be seen as providing an holistic framework for describing student learning in higher education relevant to the central concern of this thesis which evaluates the implementation of critical thinking into the curriculum.

In evaluating the effects of the *Process of Learning* upon student learning, priority is given to describing the effects from the learner's perspective. In this chapter a conceptual framework of student learning is described, and this framework is then used in evaluating student learning of the *Process of Learning*. Morgan (1991) provides a useful summary of this framework for conceptualising the learner. The interaction of elements of his conceptual framework and how it will be used in evaluating the effects of the course upon student learning, are considered in this chapter.



### **3.2 Educational Research In Higher Education - a Dichotomy**

Two disciplines look at the student learner in tertiary education. Richardson (1987) describes the two fields in question as 1) cognitive psychology and 2) education and he argues that they provide fundamentally different perceptions of the student and how he or she learns, or rather they describe the student with distinctly different priorities in mind.

Cognitive psychology derives its findings by using the experimental method (similar to the scientific method used in the physical sciences). It focuses upon processes and mechanisms within individual human beings that can be generalised across individuals and not differences between or development and change within the individual over the course of time. It is behavioural in nature looking for objectively verifiable behaviour, examining the student from the outside while inferring what is going on inside. It has been criticised because of its poor ecological validity, implying that it does not accurately reflect all elements of real world situations. An analysis of this method is provided in the section on methodology including reasons for its abandonment in favour of a broader methodology or choice of methods.

Educational research methods tend to be more eclectic, drawing on a range of investigatory methods for example from anthropology, sociology and ethnography. Education concentrates on the subjective experiences of the student which is crucial to this research. It also tends to be more naturalistic and descriptive of the settings in which the individual naturally experiences the task at hand whether it be learning in the classroom, a lecture or an examination (Richardson, 1987). Finally it describes development across time. A measure of its strength, of course, is how useful much educational research has proved and how it has been confirmed in subsequent research. Though some may caution against over confidence with this approach (Richardson, 1993) we shall see that there are many examples of it being confirmed with different groups of students, at different times and with differing educational innovations.

Colaizzi (1978) proposes that psychology is unethical and *not* objective because it denies the existence of experience. Describing human experience is both legitimate and crucial he argues:

Summarising this discussion, we can say that experience is: (a) objectively real for myself and others, (b) not an internal state but a mode of presence to the world, (c) a mode of world presence that is existentially significant, and (d) as existentially significant, it is a legitimate and necessary content for understanding human psychology. (Colaizzi, 1978: 52)

Rogers (1969) also emphasises the importance of relating to the students experience:

Such living in the moment, then, means an absence of rigidity, of tight organisation, of the imposition of structure on experience. It means instead a maximum of adaptability, a discovery of structure in experience, a flowing, changing organisation of self and personality. (Rogers, 1969: 285)

In this section the chief claim being made is that emphasis must be placed upon understanding student learning from within the subjective experience of the student if we are to appreciate the quality of learning taking place in any particular teaching environment. It is insufficient and unethical to ignore this. As we shall see in the next section, describing a framework for students' learning experiences provides us with an informed and essential account of how students experience higher education.

### **3.3 *Student Learning Experiences in Higher Education - a Theoretical Framework***

Perry (1970) examined the intellectual and ethical development of students across the college years. According to Perry, the student enters college from school with a basic duality, namely, a world view which confirms issues and knowledge in different areas in terms of right and wrong, with authority - be it the teacher, the institution, or the media. Being right and unquestioned in all matters he termed basic duality. The trend then, or development rather is towards complex dualism where the student senses that authority maybe has not got all the answers but still remains the standard. With further development the student senses perhaps that authority is encouraging the student to try and think relativistically. Eventually the student moves into a commitment to relativism, or pluralism. According to Perry this is the development that students experience if they are to acquire an intellectual and ethical plurality. Perry saw this change across the college years as a developmental phenomena. It may be worth asking whether this is this the case with students today, in the 1990s.

Marton and Saljo (1976) distinguished between two different approaches to learning which they described as the deep approach and the surface approach (also in Gibbs, 1981; Gibbs et al, 1981; Morgan, 1991a). Basically, the deep approach means that the student attempts to abstract the meaning from material, concepts and issues that are taught to them on the course and tries to assimilate it into and modify his/her existing schematic representation of that domain. In other words s/he tries to make sense of the material to be learnt. For example a student with well developed critical thinking skills is very likely to adopt a deep approach to learning.



The student that adopts the surface approach on the other hand will attempt to memorise the facts without questioning or trying to connect them. The task of learning here is to reproduce this information at examination time, more or less unaltered. Such learning can be seen as having survival value for the student in that they need to pass the exams in order to proceed to the next year's studies (Miller and Parlett, 1974). Little comprehension or meaning is gained by the student who adopts a surface approach to learning. Such a student would not have developed critical thinking skills with her course material. For example if she studied theories of personality in psychology she would not actively attempt to understand how these theories *applied* to dictators in politics.

To be able to distinguish the approach a student takes to learning is very helpful as it informs us about the quality of learning that is taking place. We are concerned with whether a student *memorises* (surface approach) or *understands* (deep approach) the issues or ideas presented to him or her. For (Gibbs, 1990),

... it is very unlikely that a student who takes a surface approach will gain a full understanding of a concept, an overview of a topic, grasp the main ideas in a chapter, be able to distinguish principles from examples, write an essay with a logical argument, or recognise the key ideas in a lecture.  
(Gibbs, 1990: 4)

Morgan (1993) refines the understanding and distinction between deep and surface approaches to learning - in essence a student using a deep approach to a learning task has an intention to understand, while the student adopting the surface approach is intent on completing the task requirements:

Students who take a surface approach fail to gain a good grasp of the content of their readings, whereas those who take a deep approach to learning do gain a full understanding of the issues in question. (Morgan, 1993: 72)

According to Gibbs (1990) the surface approach to learning is very prevalent. The learning environment for the student will also have a bearing on the approach that s/he adopts, for example having a heavy workload on the curriculum. Many studies have been conducted across a broad range of learning contexts in higher education, that have developed and refined the work of Marton and Saljo (1976; Morgan, 1993; Hounsell, 1984 on essay writing; Hodgson, 1984 on lectures and learning; Prosser and Webb, 1994 on essay writing).

Entwistle and Marton (1994) propose the concept of 'knowledge objects' in describing students' understanding of course material after intensive revision for exams. The Oxford

Centre for Staff Development (1994) has compiled a broad range of papers based upon the student learning theory presented in this chapter. The papers explore how to improve assessment and thinking and learning skills in higher education. Student learning theory (or aspects thereof) is the framework used to describe the effects of their innovations upon learning.

The approach that a student adopts to learning is not a stable personality characteristic, students can adopt either approach (Gibbs, 1990; Brown, 1993). A student that adopts a deep approach to learning may very well revert to a surface approach if the situation demands it such as if there is over assessment, too heavy a workload or poor feedback from teacher to student on their progress. However in terms of the quality of the learning outcomes, students need to be encouraged to adopt a deep approach to learning.

Perry traced the intellectual development of students across the college years as they rationalise the knowledge that they engage. Epistemology which deals with the origins, nature, methods and limits of human knowledge is used in this chapter in referring to students' state of knowledge and learning. Saljo (1979; also in Morgan, 1981, 1982, 1993; Gibbs, 1981), was interested in discovering how students conceived the *learning process* to be. Following interviews with students, he describes qualitatively different ways in which the student conceives learning. He proposed 5 conceptions of knowledge, summarised in Figure 1 below:

### **Figure 1: Conceptions of Learning<sup>4</sup>**

1. Learning as the increase of knowledge
2. Learning as memorising
3. Learning as the acquisition of facts, procedures, etc., which can be retained and/or utilised in practice
4. Learning as the abstraction of meaning
5. Learning as an interpretative process aimed at the understanding of some personal reality

According to Morgan (1993),

---

<sup>4</sup> In Saljo 1979, Morgan 1993



To summarise these variations in conceptions of learning, essentially Saljo's conceptions 1, 2 and 3 are concerned with learning as memorising and reproducing information, whereas conceptions 4 and 5 are concerned with constructing meaning and transformation and 'going beyond the information given'. Although Saljo identified these various conceptions of learning with different groups of learners, there seems to be clear developmental implication in his work. (Morgan, 1993: 63)

Whether there is an overlap in meaning between Saljo's conceptions and Perry's stages, it is clear that by examining student learning from both viewpoints, we get a more informed account of essentially how the student experiences learning in a particular context, both affectively and intellectually. Again a student with well developed critical thinking skills is likely to have a more progressed conception of learning (numbers four or five). Such a student would be more likely to perceive how models and theories are used across subject disciplines whether it is mathematics, economics or psychology. Gibbs (1990) describes the link between the conception that the student has of learning and the quality of learning that the student may have:

The connection between these underlying conceptions of learning and the approach students take to specific learning tasks is so strong that it is possible to predict the quality of learning outcomes directly from students' conceptions of learning. All you need to know about a student is that she has a conception of learning at level 1, 2 or 3 and you can be fairly certain that she will only derive a superficial and fragmentary understanding from, for example reading a chapter. (Gibbs, 1990: 5-6)

Using conceptions of learning to understand student learning is versatile, therefore, in that we can use it in a variety of learning contexts. A student's conception of learning can change, as with approaches to learning depending on the nature and demands of the learning tasks presented to him or her (Gibbs, 1990) or through progression through the course (Morgan, 1991).

The conceptions of learning above represent qualitative distinctions between students in terms of how they *experience/perceive* knowledge and learning. Their utility is also recognised by Gibbs et al.(1980):

By identifying the forms of thought within which students conceptualise the key ideas to be taught by a course, it would seem possible not only to provide a powerful strategy for teaching, but also a framework for assessing what it is that students learn from the course which takes into account the nature of the changes in their conceptions. (Gibbs et al, 1980: 10)

This framework has been extended and developed with data gathered from Open University students which the proposal of a sixth conception of learning described as

'changing as a person'. This involves the student perceiving him/herself in a fundamentally different way as a result of learning based upon transformation and interpretation of ideas (Beaty and Morgan, 1992).

In extending the framework for understanding student learning it is necessary to consider the orientation of the student, that is his or her reasons for coming to college to study. According to Morgan (1991) it

...is the collection of attitudes, aims and purposes that express a student's relationship with a course and the particular educational institution.(Morgan, 1991: 2)

Morgan (1990) distinguishes between personal, social, vocational and academic orientations, and within each of these the student can be either intrinsically or extrinsically motivated. For example, a student who is intrinsically interested from a vocational perspective will be concerned with how the course may be relevant to future career. In addition to methods above for describing student learning, we can further develop the framework for describing students' learning experiences by examining their Outcomes of Learning (Taylor et al, 1981). They distinguish this from examinations as a method of assessing what the student has learnt by arguing that exams usually look at how much the student knows, in a sense a quantitative appraisal whereas outcomes of learning looks at what the student understands:

... all those attitudes and aims which express the student's individual relationship with a course of study and the university. (Taylor et al, 1981a: 4)

Entwistle and Entwistle (1992) have further extended our ability to understand learning from the students' perspective by addressing the issue of how students conceive understanding. They point out that this issue has received little attention in student learning research. They interviewed students in their final year of studies after their examinations had finished. Although the sample chosen was quite small, the extensive and considerate analysis of the interview transcripts provides a tenable description of student understanding, suggesting a complex of interrelating categories constituting understanding.

This links up nicely with elements of the framework that I have described already.

Here, students vary in how they perceive the breadth, and depth of understanding. Also the structure within which they began to find knowledge meaningful was an issue of distinction. Some students actively created and organised their own structures for framing knowledge prior to understanding whereas others worked within a framework that might be described by books and lecturers' notes. They proposed a hierarchical framework for describing the forms of understanding they identified based on the students responses in



their interviews (see Appendices I and II; also for more recent work on these interviews see Entwistle and Marton, 1994):

They represent distinctive combinations of breadth, depth and structure used by the students in developing their understanding, both in the original learning process and during revision.

(Entwistle and Entwistle, 1992: 13)

It is worth drawing comparisons between Forms of Understanding and the work of Saljo (conceptions of learning) and Perry (with his nine stages of increasing sophistication in intellectual development from dualism towards a commitment towards relativism in reasoning). In all these schemes we are looking at increasing sophistication on the part of the learning student, arguably a developmental sequence in all schemes. Focusing more closely we also see that there is a move away from external motivation and reproducing material towards a more intrinsically motivated commitment to assimilating learning experiences into personal understanding.

Beatty and Morgan (1992) have developed the framework further in their extensive research with students at the Open University. They propose that skill in learning involves students developing confidence and competence in learning. They see skill in learning as a relational concept. The conceptual model they have put forward suggests that these stages develop towards greater independence for the student from the teacher in terms of both content and process of learning. They suggest that classroom activities to focus on confidence in learning and conceptions of learning are likely to be most beneficial for facilitating improvement. For Morgan (1991) themes or dimensions for describing student development are the competence of the student, confidence, conceptions, control and orientation.

### **3.4 *Critique of Student Learning Theory — Methodology***

In the above section I have outlined the elements that constitute a framework for describing student learning theory grounded in the experiences of the student. This framework has helped researchers to understand the experiences and intellectual developments of students engaged in higher education. So far I have described:

- i) the work of Perry which traces the development in students epistemological understanding
- ii) Marton and Saljo's research on students' approach to learning - the distinction between a deep and a surface approach

- iii) Saljo's conceptions of learning, examining what students consider learning to mean
- iv) the significance of students' orientation to learning
- v) the importance of looking at the students' outcomes of learning (this concept was introduced briefly)
- vi) what understanding means to different students.

In researching or evaluating teaching or innovations it would be unfeasible and unnecessary to draw together data that gives in depth accounts of all the six above. Instead the strength of the above framework is due to their interaction, namely that we can look at one particular aspect of a students' development, and support it by providing evidence from other elements of the scheme. For example a student with a conception of learning that suggests s/he assimilates the information presented, is also very likely to approach learning in a deep way, be 'committed to relativism' and have a more sophisticated conception of understanding if interviewed in this regard.

The utility of this theoretical framework for the *Process of Learning* is that it is possible to describe students' learning experiences within the scheme above. Priority in this research is with (ii) and (iii) above. The insights of this thesis are made plausible through integrity and confirmation of data from the following sources:

- the students themselves in interviews
- the students' assessed work for the Process of Learning
- feedback from a participant observer,
- myself

In understanding how students experience learning it would seem that the people best placed to tell you are the students themselves. I make this point because it is of methodological importance to research in student learning. Use of in-depth interviewing in the above framework has been used many times in higher educational research, and has been confirmed and utilised with students across educational settings and tasks (examples are King, 1993; Gibbs, 1992; Taylor et al, 1981).

Colaizzi (1978) suggests that there is flexibility in choosing research methods but essentially they require,

... a method that remains with human experience as it is experienced, one which tries to sustain



contact with experience as it is given. This can be achieved only by the phenomenological method of description. (Colaizzi, 1978: 53)

He advocates a phenomenological perspective the success of which he says,

.. depends on the extent that they tap the subjects' experiences of the phenomenon as distinct from their theoretical knowledge of it. (Colaizzi, 1978: 58)

He describes a process for obtaining phenomenological data, details of which are not necessary for this discussion. The main point here is the emphasis upon and justification of looking at students' experiences of learning from their own perspective, as they describe it.

Marton (1981) distinguishes between two different kinds of research emphasis. One can either describe various aspects of the world reality or else one can describe the person's reported experiences of the world reality. This latter perspective he denotes the second order perspective:

Firstly, and most obviously - we consider that to find out the different ways in which people experience, interpret, understand, apprehend, perceive or conceptualise various aspects of reality is sufficiently interesting in itself, not least because of the pedagogical potentiality and necessity of the field of knowledge to be formed. Secondly, the descriptions we arrive at from the second order perspective are autonomous in the sense that they cannot be derived from descriptions arrived at from the first-order perspective. (Marton, 1981: 178)

He argues that this work is complementary to other forms of research, and he labels it as phenomenography. For him there are in a relatively limited number of inter-subjective conceptions. For example there are five conceptions of learning according to Saljo as we saw earlier.

For Marton (1981), understanding of student learning can then be improved by complementing this second order perspective with descriptions from a first order perspective. The next section attempts to describe elements of the second order perspective namely the context within which students learn. He argues that phenomenographical research,

... is complementary to other kinds of research. It is research which aims at description, analysis, and understanding of experiences; that is, research which is directed towards experiential description. (Marton, 1981: 180)

Elements of the framework outlined above have been criticised because of the methodology employed. Perry's scheme of intellectual development has been criticised, for example, because it was conducted on a homogenous group of students, all male and studying in the humanities (Beaty and Morgan, 1992; King, 1993; Belenky et al., 1986).

Richardson (1993) has misgivings about the usefulness of research in student learning theory for practitioners without them receiving proper training. He argues that there are problems with the methodology. For example the interview may reveal emotive subjects for the interviewee which an untrained researcher might be unable to handle. Again, despite the 'grounded theory' approach of experiential researchers, they may engage in simply confirming their preconceptions, for example, by the way they conduct the interview. He also criticises the nature of the interview based methodology of this type of research which is often unspecified in studies based upon it. However, upon analysis, this would seem an unfair comment as many researchers in this field of inquiry do specify their methodology. Entwistle and Entwistle (1992) for example are thorough and clear in describing how they analysed and described their forms of understanding scheme and they also include some caveats in appraising their scheme:

The validity of the concepts and categories established depends partly on logical analysis, partly on the match with previous research findings, and partly on the extent to which the categories provide an accurate description of 'recognisable reality'. The claims for validity for much of the research on student learning rests, in part, on this appeal to the reader's own experiences of the phenomena described - the test of plausibility. Yet, that is by no means the only test of validity. The careful procedure in establishing the categories, the iterative process of refinement, and above all the links established with previous findings, together establish the credibility of the findings. Within the area of research into student learning as a whole, the combination of findings from inventory surveys with those from rigorous qualitative analyses of interviews ensures that the conclusions are soundly based on multiple methods and complementary research paradigms. (Entwistle and Entwistle, 1992: 6)

How then might this theoretical framework be of use to practitioners in evaluating their own teaching/innovations, and most importantly to this research programme? As an example a practitioner may wish to examine whether the quality of learning of the student has improved following a change in teaching or assessment. Quality of learning is expressed in this framework from the perspective of the student. So in terms of the framework above the teacher may wish to know whether having studied 'the course' the student now has a more sophisticated conception of learning and understanding, and whether s/he has a deep approach to learning (also has their confidence improved, what is their orientation and so on). It is from this perspective that he or she can appraise the course that s/he taught and its benefits to improving the quality of student learning.



Through interviews, assignments and questionnaires for example, he or she can build up a picture through cross referencing (and through matching with other variables and data collected) the subjective accounts of students, both between them as well as within individual students, while being sensitive to the validity and plausibility<sup>9</sup> of his/her claims. For example I mentioned earlier how a deep approach to learning may coincide with a more sophisticated conception of learning in Saljo's scheme. This link is supported empirically by van Rossum and Schenk (1984).

The next section deals with the learning environment and how it influences significantly the student's learning. By looking both at the students' experiences of learning as well as the context within which s/he learns, it is possible to have an holistic account of student learning in higher education, completing the picture as it were.

### **3.5 Contextual Issues and Student Learning in Higher Education**

#### **3.5.1 The need for an illuminative description**

Becker et al (1968) discussed the need for widening the perspective in which we describe student learning. A true understanding of how students experience learning cannot be made without understanding the environment in which they learn, we need to look at the

... dense network of social relationships, institutional demands and constraints, and temporally connected contingencies. (Becker et al, 1968: 2)

The benefits of looking at the organisation of the college, the administrative, pedagogical and political practices are twofold. Firstly we discover how aspects of the environment promote or inhibit learning. Secondly we can then appeal to researchers or teachers in similar settings who can understand and relate such research findings to their own practice (also Bronfenbrenner, 1977). For example, developing students critical thinking skills are enhanced in a faculty or department where all staff are agreed on its implementation. In contrast, if staff are disagreed on its implementation then progress with developing critical thinking will be more fragmented.

A good working model or schema of the student learner in higher education, is proposed by Entwistle (1987). His model considers the three way interaction between the student, teacher and department. This model is useful in that it considers the totality, or an 'aerial

---

<sup>9</sup> This is a methodological concern and not the subject of this section

view' of the learning environment and the various factors or dimensions that input into it. It is useful as a reference to those elements 'out there' that interplay with the student's learning such as assessment and teaching methods.

Parlett and Hamilton (1977) argue that educational evaluation should illuminate and inform the reader of what is really happening by also describing the political, cultural, administrative and social structures of the college or University within which the innovation or curriculum takes place (also Evans and Nation, 1989). Morgan (1991b) describes illuminative evaluation as,

... not merely concerned with adopting a different set of techniques and methods, compared to traditional evaluation; rather it is concerned with generating holistic descriptions of complex educational settings which provide an understanding of a particular 'learning milieu'. Parlett and Hamilton have developed the notion of the 'learning milieu' to represent the complex inter-relationship of the cultural, social and organisational phenomena which create a teaching-learning environment. (Morgan, 1991b: 2)

It must be recognised that no two departments will be *exactly* the same. They will differ in many respects that can be investigated, such as in the nature of assessment conducted at the college, or the quality of the feedback given to the students regarding their work, within the department. Assessment methods have a strong bearing on student learning approaches (Becker et al, 1968; Morgan, 1993; Gibbs, 1992). The nature of assessment can direct the approach to learning adopted by the student. For example if the student is overburdened by examinations and time constraints.

The perception that the student has of the department will be influenced by a variety of factors including the assessment workload, the quality of teacher feedback, departmental resources, as well as personal affective criteria within the individual student, (Gow and Kember, 1990). Overburden the student and s/he will not be able to assimilate the facts in a meaningful way. Also the issue of control is important. A didactic, authoritarian approach to teaching with little control of the learning process by students will lead to passivity in students. The student for instance if given a problem to solve which is highly contextualised may be unable to utilise the material outside of the context in which it was taught, Laurillard (1984).

Ramsden and Entwistle (1981) describe the effects that departments can have on the quality of student learning taking place according to their policies and pedagogical practices. Such policies have implications for the development of students' critical thinking skills as well:



Some departments and some lecturers seemed to facilitate a deep approach, while others used methods of teaching, or made course work demands, which forced students into surface approaches. In interviews, students clearly perceived lecturers as affecting their approaches to studying *and that*. An alternative approach is to capitalise on the fact that it is not so much how staff say they operate that is important, but how the students perceive the courses and the teaching. (Ramsden and Entwistle, 1981: 369)

If learning is to lead to greater understanding and personal meaning for the student then a conception of learning and an approach to learning that facilitates this for the student should be advocated. This can be achieved by creating the environment which allows the student greater flexibility and involvement in their own learning (Gibbs, 1992).

### **3.6 Conclusions**

In this chapter I provide a theoretical framework which describes how students learn in higher education. This structure looks at how students learn in two ways - firstly from the learner's perspective and secondly it examines how the educational environment affects the student's learning. As mentioned at the beginning of this chapter the purpose of this framework is to:

- Describe students' experiences of the *Process of Learning*
- Respond to the debate on teaching Critical Thinking courses which is the focus of this doctoral research. These issues are discussed in the previous chapter

Increasingly, researchers *and* practitioners in higher education concerned with quality in student learning, are using the framework that I have outlined above in sections 3.3, 3.4 and 3.5 to describe the effects of their innovations or pedagogical changes (Gibbs, 1992; Gibbs, 1990; The Committee of Scottish University Principals (CSUP), 1992). It enables researchers and practitioners in higher education to be able to communicate with each other.

Through illuminating particular case studies, practitioners are able to share experiences using the theoretical framework described in this chapter. This framework describes the students' authentic learning experiences both intellectual and affective, the students' development of these and their interplay with the complex learning 'atmosphere' or milieu.

I have described a framework developed by researchers and grounded in the students' perception of learning. I pointed out that there was an inter-relation between these various elements. This can aid the researcher in making more authentic claims about the

programme or innovation s/he is implementing, through cross-referencing findings obtained using different research methods. For example data which suggests that a student adopts a surface approach to learning is supported by data which reveals that the student conceives learning as memorising only (in Saljo's scheme).

In completing the picture I look at the environment in which the student learns prioritising those aspects of it, whether in the classroom or beyond the classroom walls, that influence how the student learns as described in the framework above. By combining both, the educator-researcher can gain and describe a clearer picture of his/her case study research that can be shared with fellow researchers and practitioners working in higher educational settings.

In this thesis, I evaluate the *Process of Learning* using the theoretical framework provided in sections 3.1-3.5. Further considerations from this chapter guided the research methods and findings reported in this thesis. In conclusion, in evaluating students' experience of the *Process of Learning* further important considerations are made. Student learning of the course is described from his/her own subjective experience. These experiences can be understood and described within the framework discussed in section 3.3, particularly approach to learning and conception of learning. The real benefit of this theoretical framework can be attributed to cross referencing one element of a student's development with findings from other elements of the scheme. Therefore there is flexibility in the research methods chosen, as long as the methods remain with the students' learning experience of the *Process of Learning* as it is experienced.

Evaluating the *Process of Learning* is further extended and refined, by including an assessment of the context within which the students learn both the course and their degree course. This enabled me to understand how aspects of the environment promote or detract from learning by the student. It also allows teachers and researchers in similar settings to relate these findings to their own practice.

In the next chapter, I describe the research methodology that I chose to evaluate the *Process of Learning* with the corresponding theoretical justification for doing so.



## **4. Methodological Considerations**

### **4.1 Introduction**

In chapter 3, I proposed to evaluate the *Process of Learning* by describing students' learning experiences of the programme coupled with a description of the educational environment in which the course was set up. I was also committed to implementing the course by myself. I therefore needed to use a research methodology which was flexible and supportive to the priority requirements of teaching the programme, which had been integrated into the Design and Media Management curriculum.

The method(s) most suitable to my needs of evaluating the course was Action Research. In this chapter I describe Action Research in terms of its underlying epistemology and methodology. I then justify its suitability and application to this research programme.

### **4.2 Educational Research Methodology - An overview**

The historical development of research methods in the social sciences and education up to the present day is reviewed by (Hammersley, 1992/1992a). Scientific research as a methodology for education is reviewed by Strauss and Corbin (1990) and highlights the dissatisfaction with the physical science<sup>6</sup> approach. Increasingly educational researchers explored non traditional approaches to educational evaluation in order that evaluation should be responsive to the needs and perspectives of differing audiences, illuminative of the complex organisational, teaching and learning processes at issue, relevant to public and professional decisions forthcoming, and reported in language accessible to their audiences (Norris, 1990).

Research methodology is guided by an underlying ideology or paradigm. In educational research the main debate has focused on whether to accept or reject the methods and research design that are guided by positivism. Briefly, positivism has at its core that all questions of knowledge can be ultimately reduced to scientific terms independent of metaphysics, mentalism and/or theology.

Norris (1990) questioned the scientific model as applied to educational investigation. He

---

<sup>6</sup> Briefly, accepting the canons of the scientific method requires the practitioner to adhere to the following sequential steps: define the problem; state the problem in a manner such that it can be tied in with existing theory and known empirical fact; formulate a testable hypothesis; determine the procedures of investigation; the data are gathered and analysed in accordance with the findings and consequently the hypotheses are either accepted or rejected; finally the new findings are incorporated into the existing body of scientific knowledge for that discipline (Reber, 1985).

suggested that there are problems with its predictive nature and that it trivialises the nature and extent to which learning occurs. He also stated that it is of little use in creative subjects (such as media studies) and is too narrow and terminal. Uses of the scientific method tend to have a set of variables already defined about the phenomena. This makes them inflexible and limits potential discovery (Strauss and Corbin, 1990). One must ask whether you are looking for absolute truth, which argues Hammersley (1992a) is unattainable. Realistically you are searching for degrees of truth:

All data are a construction and are subject to interpretation and as a result are open to question.

There can be no safe point beyond which no challenge can be made, and no method that can be used to process data so as to guarantee a consensus on the part of interpreters. When we construct and interpret data we do not and cannot do so simply on the basis of scientific assumptions alone. All our interpretations are historical and social products influenced by our own particular circumstances and beliefs. And their validity is relative to those circumstances and beliefs. (Hammersley, 1992a: 33)

What are the implications therefore for educational research? The choice of action research methodology for this research is justified in the following sections of this chapter as an appropriate and accurate methodology for evaluating the educational programme, the *Process of Learning*. The practical, ethical and epistemological reasons for this are discussed below in terms of qualitative and quantitative research methods. I set out their place in terms of their relation to the scientific method as used in educational research.

### **4.3 The Qualitative/Quantitative Debate In Educational Research Methodology**

Zuber-Skerritt (1992) states that there are two main paradigmatic approaches in educational research - scientific (chiefly associated with quantitative methodology - such as surveys and experimental work) and the interpretive (chiefly associated with qualitative methodology - such as the use of case studies) explanations. Schon (1983) says the scientific approach has been the dynamo in developing professional knowledge:

How comes it that in the second half of the twentieth century we find in our universities, embedded not only in men's minds but in the institutions themselves, a dominant view of professional knowledge as the application of scientific theory and technique to the instrumental problems of practice? (Schon, 1983: 30)

The 'quantitative-qualitative debate' is crucially relevant to social science research though, as we shall see below, it has been recently argued that the presentation of a qualitative



quantitative dichotomy in social research is unhelpful (Hammersley,1992;1992a).

Zuber-Skerritt (1992) describes the characteristic features of both paradigms, linking paradigm 2 with Action Research, which will be discussed later. A summary of her description is presented here with respect to educational research:

#### Paradigm 1 (quantitative)

- physical science
- traditional
- experimental (principles founded upon set up of conditions or procedures for the purpose of testing some hypothesis)
- prescriptive
- reductionist (basically, a belief that greater understanding of natural phenomena is achieved by conducting investigations carried out at one level into a deeper, more fundamental level)
- external
- nomothetic (general theorising of human behaviour)
- normative
- behaviour-oriented and positivist

#### Paradigm 2 (qualitative)

- natural science
- alternative, naturalistic
- descriptive, holistic (looks at phenomena in context)
- internal (looks at viewpoints of learners)
- ideographic (theory is generated from the case study)
- interpretive
- action-oriented
- non-positivist (does not adhere to the scientific method of research)

Schon (1983) says there are limits to what can be achieved in research and in developing our understanding within the disciplines if we adhere to Paradigm 1 above. There are limitations he argues within this paradigm to deal with complexity and uncertainty:

Increasingly we have become aware of the importance to actual practice of phenomena - complexity, uncertainty, instability, uniqueness, and value-conflict - which do not fit the model of rationality. (Schon, 1983: 39)

A positivist epistemology (or perspective) faces the highly significant problem of being rigorous yet not relevant because it ignores the difficult challenges above. For example it may not acknowledge the influence that a student's feelings on a particular day may have on her learning and concentration. This creates a gap between the real world practice and the development of knowledge based upon scientific research. In other words rationality as Schon describes it, is not competent in dealing with 'divergent' situations:

We can readily understand, therefore, not only why certainty, uniqueness, instability, and value-conflict are so troublesome to the Positivist epistemology of practice, but also why practitioners bound by this epistemology find themselves caught in a dilemma. Their definition of rigorous professional knowledge excludes phenomena they have learned to see as central to their practice. ... This dilemma of "rigor or relevance" arises more acutely in some areas of practice than in others. (Schon, 1983: 42)

Qualitative research involves the researcher's own experience, and is reported in language accessible to the subjects involved. It is grounded within the data generated by the research. Strauss and Corbin (1990) describe qualitative research as,

... any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. It can refer to research about persons' lives, stories, behaviour, but also about organisational functioning, social movements, or interactional relationships. Some of the data may be quantified as with census data but the *analysis* itself is a qualitative one. (Strauss and Corbin, 1990: 17)

They argue that the *skills* required by a qualitative researcher (some of which overlap with a quantitative researcher) are,

... theoretical and social sensitivity, the ability to maintain analytical distance while at the same time drawing upon past experience and theoretical knowledge to interpret what is seen, astute powers of observation, and good interactional skills. (Strauss and Corbin, 1990: 18)

Bryman (1992) asks whether both paradigms are reconcilable due to their differing epistemological positions and differing methods of data collection: quantitative research being associated with social survey techniques, experiments, and questionnaires whereas for qualitative research techniques include data that has not been prestructured by the researcher, varying foci and diverse forms of analysis. Perhaps it is not a question of reconciling conflicting paradigms but rather as Hammersley (1992a) points out that

... what is required in a research report is that it makes clear that it is a fallible construction that provides a necessarily selective representation of the phenomena to which it refers. Furthermore, it



should provide the reader with the information and evidence necessary to assess the validity and relevance of the claims it makes. (Hammersley, 1992a: 38)

He does not believe that the 'hard' distinction between qualitative and quantitative paradigmatic research approaches is useful.

#### **4.4 *Moving from Dichotomy to Unity - Rationale for Combining Methods***

It is more practical and accurate to move away from the paradigm dichotomy towards an eclectic view of methods employed and viewed within the 'real' and wider context of purpose, politics, change and pragmatics. In practice after all, there is use of research methods, and types of data from both paradigms (Zuber-Skerritt, 1992). Walker (1989) says that adopting an 'either quantitative/or qualitative' approach to selection of methods is inappropriate as it obscures the reality of doing research. Instead, the methods go in search of the problem, according to the experience of the researcher as well as his or her preferred choice and experience of methods.

Hammersley (1992) addresses the criteria (namely the data, the issue of natural versus artificial settings, and the descriptions of behaviour) by which qualitative researchers or advocates distinguish themselves from quantitative researchers to show how the traditional view of research paradigm dichotomy is spurious and unhelpful. Hammersley argues that it is an oversimplification to view quantitative research as 'hypothetico-deductive' while qualitative research is seen as inductive<sup>7</sup> in approach (also Bryman, 1992). Brannen (1992) argues that the dichotomy should be kept if only to keep a degree of theoretical perspective or sharpness.

There are problems therefore, with carrying out research in education with a commitment to either a qualitative or quantitative research paradigm. As has been shown, there are difficulties with definition and terms vary widely between researchers (though admittedly they are close in meaning). The data generated by both approaches does not fit nicely into the respective expectations of methods based on underlying epistemology. In practice research is not conducted in the manner espoused by the paradigm to which one is committed.

Practicalities must play a very important part in any research project. The distinction therefore tends to blur between the two paradigms in terms of strict definitions, in the data

---

<sup>7</sup> Reasoning that begins with a specific set of assumptions and attempts to draw conclusions or derive theorems from them.

<sup>8</sup> A process of reasoning in which general principles are inferred from specific cases.

generated, and in the reality of research involvement. If this is the case it is not surprising that a number of writers have begun proposing the combining of methods for conducting educational research as the best way forward. In the following section, the arguments for integrating methods is presented, as well as its justification and suggested uses in practice.

#### **4.5    *Ways to Combine Methods***

Brannen (1992) justifies the combination of methods from both traditions. He proposes that if the researcher does not suggest a range of methods appropriate to the research problem under investigation, then the research findings 'will be narrow and inadequate' (p 11). Pragmatism requires the researcher to compromise despite his/her epistemological allegiances (Walker, 1989), profoundly influencing his/her choice or combination of methods.

In choosing research methods, some researchers suggest that you take each case as it comes and get a feel for its particular nuances or character (Walker, 1989). While the literature on methodology tends to link epistemology with method, namely quantitative method with positivism and qualitative method with an interpretive epistemology, in reality pragmatism or technical details dominate the landscape of choice of methods for the researcher. Flexibility therefore is necessary in choosing integration of methods in your research design.

#### **4.6    *Framework for Combining Methods Relevant to this Research***

Triangulation has often been described as the main way to combine methods (Bryman, 1992). This involves the use of different research methods and perspectives which when combined provide clearer findings. For example, asking students, the teacher and a participant observer to provide an account of a particular lesson. As with all research designs where there is flexibility, it is important to be open to the new and the unexpected (Norris, 1990).

Triangulation is practical in that it realises that research in education is diverse in terms of cultural and educational environments (thus preventing attempts at systematisation of qualitative methods). It also empathises with the differing audiences who take a more active involved role in educational research - students and lecturers - often leading to fundamental change (Schatz, 1993). Brannen (1992) proposes ways to combine methods in the research process. Qualitative and quantitative methods can be combined either equally or subservient to each other.



Walker (1989) distinguishes between triads and the method of triangulation. While triads involve a degree of separation of methods, triangulation embodies greater undercutting of methods unto the research task with the reasoning that the whole is greater than the sum of its parts. Brannen (1992) suggests different possible approaches to triangulation by having

- i) multiple methods- a choice of between or within methods
- ii) multiple investigators- team rather than individual effort so as to bring in different individual perspectives
- iii) multiple data sets wherein,

... different data sets may be derived through the application of different methods, but also through the use of the same method at different times or with different sources. (Brannen, 1992: 12)

- iv) multiple theories- whereby they compete for eminence

Again it is crucial to highlight the role of being practical in the research undertaking, in terms of the decisions being made about the research methods, the goals of the research, the data generated and how to analyse it. Pragmatics permeates the research process.

#### **4.7 Action Research**

It is necessary to justify flexibility in choice of research methods for the researcher. Also it is necessary to develop or explain a framework that encapsulates the rationale underlying this research, its aims and its procedures. Action research enables the teacher as researcher to holistically appraise their teaching and the learning experiences of their students. In contrast to this, in a hierarchical model of professional knowledge according to Schon (1983),

... research is institutionally separate from practice, connected to it by carefully defined relationships of exchange. ... Practitioners are supposed to furnish researchers with problems for study and with tests of the utility of research results. The researcher's role is distinct from, and usually considered superior to, the role of the practitioner. (Schon, 1983: 26)

Zuber-Skerritt (1992) states that:

Action research has been suggested as an appropriate and effective way to integrate educational research and teaching practice. (Zuber-Skerritt, 1992: 87)

Action research claims Zuber-Skerritt (1992a) manages an ongoing dialogue between theory and practice in higher education leading to,

... the improvement of practice, the improvement of the understanding of practice by its practitioners and the improvement of the situation in which practice takes place. (Zuber-Skerritt, 1992a: 15)

In action research, priority is placed upon the experiences of the student, the environment in which s/he experiences learning and the manner in which s/he resolves new concepts. Such an holistic appraisal of student learning must encompass descriptions of social, emotional and cognitive development experienced by the individual. Teachers must be involved in the research process throughout (from planning to reporting) if practice is to improve. Responsibility should not be solely in the hands of the researcher. This reflection in action enables the practitioner to deal more effectively with situations in the research that contain,

... uncertainty, instability, uniqueness and value-conflict. (Schon, 1983: 50)

Common sense is allowed to prevail in the research process. For example, the research methods might be changed on the basis of suggestions and/or reluctance with a particular method coming from students.

The experiential learning model of Kurt Lewin (1936) sets a pattern for action research procedure: that is, concrete experience leading to observations and reflections, then the formation of abstract concepts and generalisations and finally testing implications of concepts in new situations which links with concrete experience in a never ending cycle. Zuber-Skerritt (1992) says that the teacher engaging in action research proceeds,

... in a spiral of steps. Each step is composed of a cycle of planning, action and fact-finding about the results of the action. (Zuber-Skerritt, 1992: 94)

Here the emphasis is upon *understanding*, on getting inside the person's mind. It has less to do with traditional emphasis found in quantitative research, upon prediction and control. The strength of action research stems from evaluating a plan openly, gaining new insights from this about how the plan (or educational innovation is progressing) and then modifying the innovation with a view to improving the situation for those involved on a consensual basis. For Altrichter (1993), action research,

... is not a method of data analysis. Neither is it characterised by specific methods, but rather by



The approach emphasises strategy rather than technical concerns for specific research tactics. He reflects the growing awareness or orientation of researchers towards combining methods across the dichotomy.

He justifies this by suggesting that the researcher has an inventory of rules which you use flexibly for each assignment but which you must justify according to choice. Pragmatism, as we shall see, plays an important part ultimately in the research process:

Research is not the application of pre-specified methods, but it is methodical in itself, is essentially a reflexive endeavour' ... & ...'Researchers must scrutinise their 'methods-in-use' to learn more about the potential and pitfalls of these methods in specific contexts and to prevent them from becoming petrified.(Altrichter, 1993: 42)

We can see from this that research must be flexible. In addition to epistemological considerations, the quality of reflection in action can be enhanced by paying close attention to ethical and pragmatic criteria as well. Nor can we ignore the reaction of students to the phenomena of being evaluated in research of this nature. But it can be used to improve the research as well as the situation thereafter.

Action research strategy involves collaborating with other people involved in the learning situation, working at developing co-operation between those involved (Altrichter, 1993). I believe this cooperation should be as total as possible, though some would disagree. Concerning pragmatic criteria, there may well be a tension between pragmatism, ethics and epistemology in your research as well as political undercurrents. For example, a student dissatisfied with a class activity may not be willing to provide feedback at the end of the lesson, and the teacher may not press him further on this issue.

Action research is unusual as the researcher may be intimately involved with the project. For example s/he may work at the institution in which s/he is conducting the research. So one may have the problem of teacher intrusion, or researcher-teacher conflict. In such a situation the teacher may face a crisis in which s/he has to prioritise teaching over the aims or goals of the research. Walker (1989) makes the point that it is the researchers themselves that need to be protected in the process of interventionist research. Each research undertaking is unique, so resolution of this conflict must be appropriate to each research undertaking.

Stenhouse (in Hammersley, 1992) initiated the teacher-as-researcher movement,

... which argues that school teachers should be involved in a cycle of practice, reflection and reorientation, the process of reflection being modelled on research (Stenhouse, 1975: 24)

Altrichter (1993) emphasises the democratic nature of action research. For many advocates of action research, it is imperative that a challenging of the institutional status quo is incorporated in action research. Further, action research is seen as a rejection of positivism, being practically oriented and involving the participants (Kemmis, 1985).

The types of action research are technical, practical and emancipatory (seeking to improve pedagogy) in order of importance (Altrichter, 1993). Altrichter formulates the criteria, which constitute action research within the concept of reflective professional practice. Action research,

- Is characterised by confronting data from different perspectives (triangulation)
- Is characterised by closely and iteratively linking reflection and action (iterativity is the main source of rigour in action research)
- Incorporates reflection and development of educational values
- Is characterised by holistic, inclusive reflection
- Implies research and development of one's own self concept and competency
- Is characterised by inserting individual findings into a critical professional discussion (Altrichter, 1993: 47-51).

In evaluating the Process of Learning, I had to make important considerations in my choice of research methods. Evaluation had to be open to the unexpected and not be blinkered to important events as they occurred both within the teaching sessions as well as outside it. It needed to be flexible and adaptive to the progress of the course. Such flexibility also required access to a wide selection of research methods, from across the 'dichotomy' discussed earlier.

Evaluation also needed to be broad in its coverage, for example to cover the impact of assessment and workload from other parts of the degree course upon the Process of Learning. Evaluation should allow for new thinking and insights while maintaining rigor. Above all it should be relevant to practitioners while at the same time develop our professional understanding of the relevant educational issues and concerns. These goals in evaluation therefore, led me to choose action research, with access to a broad variety of research methods if necessary. Flexibility and rigor in evaluation are imperative (Schon, 1983).

In evaluating the Process of Learning I used the tenets of action research methodology in obtaining findings on this course. These methods are described in the following chapters, which report upon the findings of this research. The methods are practical yet strive to be emancipatory by leading to improvements in student learning on the medium to long term. Summarised overleaf they are as follows:



Chapter	Research methods used	Reason for use
Six	Semi-structured interviews with students and staff on the Design and Media Management course. Research conducted prior to teaching the Process of Learning.	To understand the students' learning environment. To use this data to help inform the design of the Process of Learning. Refer to Section 3.5
Seven	Triangulation – multiple methods (4.6). Diary kept by myself to record teaching of the Sessions. Written analysis of Process of Learning by Participant Observer. Student ratings of each Session describing learning experiences plus suggestions on how class might be improved. Student exercises (Appendices) using structured group discussion (7.1).	Emancipatory – to refine subsequent teaching and evaluation of the course (iteratively). Holism – to include the views of all students and an observer so as to achieve greater objective understanding (the whole is greater than the sum of the parts) of student learning on the Process of Learning. Practicality – flexibility of choosing methods assists the teacher as researcher. Contextual – informs researcher of contextual influences on student learning (3.5).
	Methods abandoned (in chapter seven) include audio and videotaping of four Sessions as it became impractical.	Methods had been chosen as part of multiple methods to aid triangulation. Very difficult to conduct without assistance. For example, ensuring camera angles and microphone were correctly placed etc.
Eight	Eight semi-structured interviews with students (of mixed ability) during or upon completion of the Process of Learning assignment (chapter 9).	To determine students' learning experiences and reaction to the Process of Learning. To gain further insight on the influence of context upon student learning of the course. To continue triangulation method suitable to teacher as researcher.
Nine	Analysis of Process of Learning assignment (completed by students at the end of the course). The assignment aimed to focus students' attention upon the Process of Learning and encourage students to take part in the course activities in earnest.	To determine whether the Process of Learning and accompanying assignment had led to improvements in the students' critical thinking skills. To build upon the findings from chapters six, seven and eight.
Six – Nine	Multiple research methods. Triangulation of methods so as to facilitate the teacher as researcher. To examine student learning experiences in first year while illuminating the context in which they learn.	To evaluate the Process of Learning by evaluating students' learning experiences of the course as well as understanding how the context in which they learn can promote or inhibit such learning. To address the central question of the thesis (5.3) – whether teaching critical thinking is a syntax or semantic for students learning their first year course discipline.

This thesis focused upon the following central question – is teaching critical thinking skills to students semantically meaningful or does it remain a syntax for the student (2.9). The data in chapters 6-9 respond to this question. The analysis of the data is linked to concepts within the literature (analysis in sections 6.5, 7.3, 8.4 and 9.4). These concepts are the framework by which critical thinking is defined – the elements of the thought, macro abilities, affective dimensions and intellectual standards (2.6).

This thesis does not make claim to advance student-learning theory such as conception of learning or students approach to learning (3.4) and so forth. References to students' conception of learning etc (chapter eight) are general – the students' expressions should be seen as examples only of a particular conception of learning.

## 4.8 Conclusions

There is an debate amongst educational researchers as to what methods constitute the most effective approach to investigating, or more importantly understanding



educational innovation. Methodological concerns do not stand alone. When choosing methods of research, the researcher must consider underlying epistemology, ethical considerations and who the appropriate audience will be. For example methods have emerged as a reaction against or felt disappointment with the apparent shortcomings of the scientific method (and underlying epistemology) as applied to educational research.

Recently many writers have argued against pursuing this debate along traditional lines, of either choosing the quantitative or qualitative paradigms which I discussed in this chapter. They have shifted away from this either/or position towards a position of greater eclecticism, urging instead a move towards combining methods. The main reasons for this were discussed, namely that the dichotomy for many reasons is false. It is essential to be able to deal with the day to day realities and unexpected phenomena of teaching, and the potential for a richer more informed account and understanding of the innovation that comes with choosing from diversity in methods.

It was shown how educational theory has little influence on the practice of many teachers (Zuber-Skerritt, 1992; 1992a; Whyte, 1991; Walker, 1989). There is a paucity of literature regarding techniques for teachers interested in conducting their own research. Most practitioners do not apply educational theory either because they do not have the time to consult it or because they find that it bears little relevance to the everyday pedagogical realities. Therefore a dialogue between teachers and theories is pursued in this research and such dialogue we saw must be teacher led.

Action research provides the appropriate framework (Kurt Lewin, 1936) and has been developed and refined in order to be made appropriate for educational research. It is scientific in character despite its epistemological and methodological commitments to qualitative research 'principles'. In this chapter I discussed the process of action research in terms of the methods it employs. I looked at the iterative nature of action research. Further attributes of action research were discussed including chiefly its association with being democratic and emancipatory in nature. We also saw that it has a political motivation in that it is concerned with *improving* practice through theory. Different types of action research are discussed in this regard. Action research necessarily implies a case study methodology as it involves the teacher investigating his/her own teaching practice.

Finally I outlined my application of action research methodology to this research programme. I presented the research methods that I used in evaluating the *Process of Learning* and explained how they adhere to the principles of action research (described in section 4.7). These tenets guided my data collection before, during and after teaching the *Process of Learning*. Consequently, analysis of data in the following chapters (6-9) and my discussion in chapter ten respond to teaching critical thinking from an emancipatory



action research perspective.

In the next chapter (five), I summarise key elements of chapters two to four and introduce the course content of the *Process of Learning*.

## **5. Summary of the Preceding Chapters and Introduction to the Process of Learning**

### **5.1 Summary of the Preceding Chapters**

Before evaluating the educational programmes I taught in the University, I want to summarise the influences in the preceding chapters that informed the course design, its implementation and evaluation.

#### **5.1.1 Student Learning Theory in Higher Education - a Conceptual Framework**

We examined a body of theory that conceptualises or describes *student learning in higher education*. The student was seen as tackling a learning activity in a deep or surface approach and this variation was seen as context specific. A deep approach we have seen is deemed to be more sophisticated than a surface one in terms of improving understanding, wherein the student actively engages with the concepts and ideas presented to him/her. This is opposed to the student who merely commits the information presented to memory with little attempt to make sense of the material or to try and incorporate the ideas into his/her *personal* understanding of that discipline or discourse.

Conceptions of learning were then examined, that is, how do students perceive the nature of learning? Again we see degrees of sophistication in how the student engages with a body of ideas or information. For instance, the student may see information as just a body of facts with little active attempt to interrelate them. A more sophisticated conception of learning in a student would see learning as an internalisation of ideas into their schema or contemporary understanding. Whether it be a religious viewpoint, an introduction to a new concept or law in physics or whether s/he is presented with a point of view that challenges his/her views on racism- in more advanced conceptions, the individual makes personal use of the information provided and incorporates it into his/her contemporary schema.

The 'orientation' of the student also influences his or her approach to learning. One student, for instance, may come to college to 'get a degree'; another may come to college for 'personal enlightenment'. The student who studies for qualifications may very well adopt a surface approach which may or may not be compatible with the formal assessment structures of the relevant faculty.

We are also interested in how the student perceives understanding, namely what does it mean to understand 'something', and it can be seen that here also there are differing forms or interpretations by the student about the nature of understanding. The 'confidence' that a



student has will also influence the motivation of the student to learn. Also the student's 'competence' is also considered. Here we are looking at the affective elements of learning to see what part they have to play in how the student learns.

Attention is being paid to the internal state of mind of the student. We are examining the experience of learning more from the perspective of the student and less from the perspective of the objective or external researcher. In order to see the perspectives of the learners, I chose methods that would best reveal the intellectual and affective experiences of individual students to the course as they developed. I intended that these methods would also allow the student greater scope for expression of their own personal perspective. While the emphasis in this research is with personal experiences within the conceptual framework described, it is also crucial to describe the context within which the *Process of Learning* was taught. We must also look at the broader and indirect influences such as the political culture of the college.

We must consider a number of *pedagogical issues* which have a bearing on this research. There are many events going on outside the classroom that have an indirect but noticeable impact on a teaching innovation. The methods of teaching of the 'innovator' as well as the teaching methods of other members of staff on the course impact greatly on the approach to learning taken by the student. Didactic teaching, or teaching from the front in the conventional sense, may result in passivity amongst the students, with little engagement with the concepts or ideas being discussed by the students. Here the lecturer takes control of the content of the course and its delivery with little input or involvement by students. Student centred learning on the other hand, as we have seen, involves the students more. The locus of control shifts increasingly towards the student and concomitant with that is his/her increasing responsibility for learning and discourse.

Assessment also has a major part to play in the learning of the student as we have seen. A college, faculty or department which requires the students to undergo extensive formal assessment, where the curriculum is heavily overloaded, may induce the students to approach learning in a surface manner. This is basically because it comes down to a matter of survival for the student. The student needs to pass the exams in order to proceed to the next year of studies. There are other forces at work besides these, such as resources within the department, communication amongst staff and others, that also affect the nature of learning engaged in by the student. This course attempted to be as student centred as possible under the circumstances which are described later. The purpose of this was to engage the student more by giving him/her more involvement and responsibility in his/her learning. I intended to look at the effects of this over a semester to see if there were developments or improvements in the quality of students understanding of the course.



So far, two important themes have arisen. Firstly, an emphasis upon understanding student learning from the perspective and experience of the individual student, with the possibility of comparing groups as well. Here we look at the involvement of the student with knowledge, ideas and how s/he relates them to his/her 'world view' or 'discourse view'. Secondly the importance of looking at the wider environment both within the classroom as well as outside the classroom is recognised and described in relation to the student.

### 5.1.2 Teaching Critical Thinking in Higher Education

Critical thinking was reviewed, chiefly in the context of higher education. Concern is widely expressed about many students leaving college without the ability to think critically. It is suggested that to improve this one should identify the skills and their relationship with the content of the course being studied and to chart their development within the student. Many authors have listed the skills they feel constitute thinking. They argue that if the student is to think critically then s/he must acquire these skills and use them in the subject or area of discourse that they engage with. There is no consensus on the number or type of skills that authors deem necessary to become a critical thinker.

The relationship between epistemological development and the ability to think critically was acknowledged, with the authors proposing that the student is 'harnessed' by his/her conceptual understanding of knowledge. This links up with the work of Perry (1970), looking at the different forms of intellectual and ethical development. The question is also raised as to whether the student can be taught such skills or whether they have to construct them themselves in their own good time. A student adopting a surface approach to learning is less likely to develop his/her critical thinking skills than a student who adopts a deep approach.

There is lack of consensus on issues such as the number of thinking skills that writers feel necessary to acquire, and many questions are being raised about the value of instruction in thinking critically. There are even more fundamental differences between writers in how they conceptualise critical thinking (as seen in chapter 2). Some academics have argued that there are problems with defining the nature of critical thinking, that it is merely forms of reasoning that you are considering. Information is so complex, according to one author, even for the most simple problems, that no 'package' of skills can help one in unravelling the subtleties and nuances of a range of subjects. For such writers the problem is simply that one must teach students to understand a subject domain, rather than teaching the student to acquire a set of thinking skills that can be brought to bear on all domains. It is important to bind thinking to 'something' such as economics or physics. They advocate teaching each subject with more student centredness, and less didactic teaching rather



than adding a whole new course teaching critical thinking to a curriculum that may already be overloaded. Improved learning is to be found *within* the courses themselves they would argue and that what really needs to be improved is the teaching. So for such writers the problem is one of *pedagogy not epistemology*. This is an important consideration in this educational programme.

As discussed in chapter 2, some writers mention the paradox that courses on critical thinking are sometimes used to maintain the status quo in society rather than to lead to more open democratic thinkers in society. Many tests have been constructed for measuring development in critical thinking. However they were not chosen as an evaluatory method in this research. This educational programme<sup>9</sup> does not provide the more explicit teaching of skills required by these tests which could only be developed over a greater amount of time. Constraints of time, resources and accessibility to the college limited the scope of the *Process of Learning*. The course could be made more comprehensive if it were to run over the three years of the degree course. What was necessary was that the students be provided with an opportunity to reflect upon the process of learning. Also these tests are norm referenced with US students so they are not appropriate to UK students. It is more informative to evaluate the effect of the *Process of Learning* on the students' learning in terms of the framework conceptualised in chapter 3.

### 5.1.3 Action Research Methodology

The issue of whether the problem of improving the quality of student learning lies with improving the teaching or whether it is better to teach critical thinking, or both, is important to this research and will be addressed. In order to understand how the students reacted to the *Process of Learning*, it is necessary to have a sound evaluation strategy. The researcher must choose from a range of methods that are on offer. In this research undertaking, there are many considerations that influenced the *choice of methods*. I had to negotiate access to a University in London, and be able to teach a course that I requested become a part of the curriculum for both groups of students. This was necessary in order that the students might accept the course as part of their curriculum thus taking it more seriously than if it were an optional course, which the students might see as an experiment with little connection to their course. It was important that the innovation was an *integral* part of the course, while being evaluated at the same time by the teacher/researcher.

When undertaking research of this kind, it requires *flexibility* and *resourcefulness* - in this research I designed, taught, and evaluated the course. It may require, for example, getting certain favours carried out that might only be available for permanent staff there - such as

---

<sup>9</sup> The *Process of Learning*, described later in this chapter



the use of reprographics. Also, having the innovation assessed required a great deal of negotiation. It is also essential to keep in touch regularly when working at another college which is 50 miles away. Sensitivity is an important concept here. It was important for me to become aware of the cultural history and political structure of the college in order to get things done more smoothly. For example interviews had been arranged with students that were then cancelled because members of staff vetoed access at the time to students. It was at a time when there was a great deal of structural change occurring within the college.

Once the teaching began, it was necessary to make decisions from day to day for a number of reasons. Firstly I was teaching *and* evaluating the course -I was both teacher and researcher at the same time. Both teaching and evaluating are not always compatible - one must take priority over the other. Conflict arises when teaching does not go necessarily to plan yet you still have to try and get feedback on how the course went; an ethical conflict emerges on whether to continue teaching in order to clarify what was misunderstood to students or instead spend the time gathering data on the course with for example the students filling in a questionnaire on their impressions of the class. In this research priority was placed on the teaching (for reasons to be discussed). Students were informed that the course was integral to the first year curriculum and that it was also being evaluated so as to inform practitioners.

Combining methods was justified in the methodology chapter as the way in which this research would be conducted. As was discussed, there are no hard and fast right wrong answers when it comes to choosing methods of collecting feedback. Each case study is unique and the researcher must make decisions 'on the ground' that might over ride plans made prior to the beginning of teaching. One example of this was the decision not to video tape the class during teaching because of protests from one of the students. In any case, it would have been difficult to get the right camera angle on the class and the teacher could not be expected to teach, evaluate and film the class at the same time.

It is important to be practical in this type of research (action research). The researcher-teacher finds that s/he is juggling many balls at the same time and in order to do this competently s/he must call upon personal or professional judgement during the actual teaching. The degree of experience of the researcher will be influential here. It is also important to recognise that the researcher is human! If the teaching does not go well then his/her motivation to carry out tests/gather information may well be diminished. This is because teaching the course is the primary responsibility and if students are dissatisfied or unsure about what the session was about or where the course was going, it is hard to slip into the shoes of the researcher automatically without clarification of any problems that they are having with the course.



## **5.2 Research Methods and Data Analysis Utilised**

In this research an action research methodology was adopted in order to gain an overall perspective on understanding the teaching and learning experiences of students, who were encouraged to reflect upon their experiences of learning through the *Process of Learning* linked to their studies for the Design and Media Management degree course. As teacher researcher, the researcher is able to obtain rich and complex qualitative data. The research methods used were as follows:

(i) In researching the organisational context of Design and Media Management and Thames Valley University -

- staff interviews
- student interviews
- observations of related Design and Media Management teaching modules were carried out

(ii) In evaluating the *Process of Learning* as teacher-researcher the following data was collected -

- written feedback from students and from Ella, the participant observer at the end of each session
- a diary written by the researcher describing the events of each session with the students
- student interviews upon completion of the *Process of Learning*
- a written assignment on the *Process of Learning* which students had to complete as part of their course requirements<sup>10</sup>
- an interview with the participant observer upon completion of the course<sup>11</sup>
- a diary account of the researcher's experiences as an action researcher

Documentation generated through class work was collected where appropriate, an example of which I include in Appendix X. Other forms of collection were tried but later abandoned. For example, audio taping of the class was unsuccessful as it was difficult upon playback to distinguish individual students' voices (and video taping also had to be stopped). Therefore I stopped using these techniques.

Given the richness of the qualitative data I needed to consider how it might be

---

<sup>10</sup> The assignment was designed to assess how each student's critical thinking skills had developed specific to the *Process of Learning*.

<sup>11</sup> See Appendix XIV

appropriately and effectively analysed. The analysis was informed by ideas from illuminative evaluation. It aimed to be an 'illuminative interpretation' of a natural educational setting. Parlett and Hamilton (1977) state the aims of illuminative evaluation to be:

To study the innovative program: see how it operates; how it is influenced by the various school situations in which it is applied; what those directly concerned regard as its advantages and disadvantages; and how students' intellectual tasks and academic experiences are most affected. It attempts to discover and document what it is like to be participating in the scheme, whether as a teacher or pupil; and in addition, to discern and discuss the innovation's most significant features, recurring concomitants, and critical processes. In short, it seeks to address and to illuminate a complex array of questions. (Parlett and Hamilton, 1977: 13)

In generating qualitative data in this research from a range of methods, analysis was guided by the aim of describing the *Process of Learning* from a number of different perspectives. It examines the students' perspectives, the researcher's perspective and the opinions of the participant observer. This is justified by the need to be both eclectic and adaptable to a learning environment that is changing and developing, and by the aim of obtaining a holistic description of the innovation and its impact upon learning:

Illuminative evaluation is not a standard methodological package but a general research strategy. It aims to be both adaptable and eclectic. The choice of research tactics follows not from research doctrine but from decisions in each case as to the best available techniques: the problem defines the methods used, not *vice-versa*. Equally, no method (with its own built-in limitations) is used exclusively or in isolation; different techniques are combined to throw light on a common problem. Besides viewing the problem from a number of angles, this 'triangulation' approach also facilitates the cross checking of otherwise tentative findings. (Parlett and Hamilton, 1977: 17)

The research analysis of qualitative data has been informed by the 'grounded theory'<sup>12</sup> approach to handling qualitative data though not in a rigorous sense, since the interviews and the *Process of Learning* report text analysis for example, were influenced by student learning theory and critical thinking literature. The analysis may therefore be described as eclectic, drawing upon illuminative evaluation within an action research perspective (Parlett and Hamilton, 1977; Evans and Nation, 1989; Carr and Kemmis, 1986; Glaser and Strauss, 1973).

Interviews conducted in this research were transcribed and then analysed through several readings and reviews. Also, the written assignment on the *Process of Learning*, student

---

<sup>12</sup> Here, theory is derived or driven by the data obtained.



feedback during the course sessions, Ella's written feedback and my diary account are analysed within this perspective. Concepts important to the students' learning within the framework of this thesis 'questions' and the student learning framework were identified. Also concepts that emerged during the interviews, student ratings of the sessions, my diary account and assignment analyses were identified. Concepts are reported, if they are significant, salient and relevant to the questions raised in this research.

The significance of the data reported here is aided by the knowledge of the researcher as teacher. In being involved with the teaching of the course, one is in an advantaged position when it comes to analysis, as one can understand more clearly the significance of the data, such as student responses. This 'intimate' involvement offers advantages over research conducted from a more 'detached' viewpoint. 'Objectivity' or accuracy is maintained through comparing (triangulating) the findings from a number of different perspectives.

### **5.3 Central Issues In this Thesis**

This thesis asks whether engaging the student in their first year of studies, in reflecting upon how they learn, both in terms of their experiences of learning activities as well as their use of critical thinking skills, leads to a greater understanding of, and critical involvement in their learning. This is evaluated and described through the student learning framework discussed in chapter 3 and through looking at factors in the environment that may have an important influence on the student's learning experience in college.

Consideration will be given to:

- the issue raised by McPeck (1990) of the need for a subject content (semantic) as well as a method (syntactic element) to learning
- the ability of critical thinking to deal with complex issues
- the students possible resistance to 'change'
- the benefits for learning of thinking about thinking
- how teaching critical reflection might be developed over the 3-4 years of an undergraduate degree

### **5.4 Aims of the Process of Learning**

This research programme focused upon teaching an educational innovation, the *Process of Learning* at a University in London. The innovation was presented to business

management<sup>13</sup> students in their first year of studies at the University in the second semester of their academic year, between February and June 1993, being assessed in the business management degree course. The course was designed, implemented, researched and evaluated by the writer.

The course was designed with the intention of involving the students in critically reflecting upon how they learn - that is in reflecting upon the process of learning as they experience it in their first year studies. The intention was to discover whether this improved the students ability to involve themselves more in their own learning in the educative process. More specifically it was intended to evaluate the findings and to compare them within a framework that describes student learning in higher education. This is presented in Chapter 3.

This research also examines whether the literature on student educational theory can be made more accessible to the practitioner. It is also aimed to shed light on student learning conceptualisations. Furthermore it was also intended that the course to be seen as beneficial to the students, should be incorporated into the curriculum, and that feedback from the research would be provided to staff interested in improving the quality of the course teaching.

### **5.5 *Chronology of Events Prior to the Process of Learning***

The *Process of Learning* was integrated into the first year curriculum of both psychology and management degree courses over the second semester (February-June) of the 1992/93 academic year. For psychology students the course was entitled *Personal Development*<sup>14</sup>. It was taught on a group discussionary basis the teaching being done by myself, the researcher.

A number of prior activities that took place. In May/June 1992, preliminary interviews with staff and students were conducted in order to inform the design of the course as well as provide information on the context within which the programme was to be set. This was not done with the psychology students as permission was refused to interview them. In the first semester I sat in on the Human Resource Module on the Design and Media Management course as a participant observer. I maintained a log of the class activities and description of the activities taking place. From January 1992 I began negotiations with staff from both faculties to teach a course on both the Psychology in the Community B.Sc.

---

<sup>13</sup> It was also taught to Psychology students, with the title *Personal Development*. However the thesis concentrates upon the *Process of Learning* course

<sup>14</sup> This was due to departmental reasons outside of my control



degree course, as well as on the Design and Media Management degree course. Regular contact was maintained during the coming months in order to have the courses accepted. It was necessary to contact heads of both departments, curriculum development officers and other administrative staff.

It became clear only towards the end of 1992, that I would be able to implement the *Process of Learning* in both departments. This delayed the planning and preparation of the course as I was not sure how the course would be inserted, how much time I would have, whether it would be assessed, if I would have a classroom to teach in and more besides. In the meantime I participated in the courses Human Resource Audit (HRA) and Human Resource Management (HRM) as both were taught by Dr. Dave Grant and Mr. Chris Dawson, with whom I liaised.

The *Process of Learning* was incorporated into HRM. I sat in on the classes in order to meet the students. It was also agreed that it would be assessed formally in HRM as 50% of that module. This was unlike *Personal Development* in BSc Psychology in the Community which was optional for the students and was not assessed and took over from a course in the first semester entitled Study Skills. This provides an interesting comparison between the courses in terms of understanding the impact of assessment on student attendance. Student attendance was markedly down (approximately 0-20% turnout for sessions) on BSc Psychology in the Community which had no assessment on it compared with Design and Media Management (85%+ turnout).

Teaching began in February 1993 with the *Personal Development* course. The *Process of Learning* course commenced in April 1993. Both ran until May 1993. The *Process of Learning* course was assessed formally, the hand-in date being June 17th. During the teaching on both courses (as well as before and afterwards) evaluation ran concurrently, and developed a number of problems which will be highlighted later, as the two case studies are discussed. Students on Design and Media Management received feedback on their report assignment at the end of term. I also followed up students on both courses afterwards with the intention of interviewing them and their reactions to the course they received.

Nine of the 25 Design and Media Management students agreed to be interviewed, using both face-to-face interviews as well as self report interviews (where the tape record their own answers). Eight of the 25 students contacted on Psychology in the Community according to attendance agreed to being interviewed. Approximately 30 of the 64 students on Psychology in the Community year one did not attend the course or attended it only once. The majority of such students were not contacted by me for obvious reasons. I reduced contact with the college, upon completion of interviews and marking of the



assignment. However a seminar was conducted later that academic year at the college. I provided feedback to staff on the utility of such a course in the curriculum, and feedback on student perceptions of the course.

## **5.6 Course Content of the Process of Learning**

The courses that I taught to both students studying *Personal Development* (Psychology in the Community students) and the *Process of Learning* (Design and Media Management students) are very similar in most respects, differing in one fundamental way and a few superficial ways. I describe the differences that need to be borne in mind when appraising both courses followed by the course content which can be treated as essentially the same for both.

Assessment was included on the *Process of Learning* course with Design and Media Management students, and this inclusion differentiated the course from *Personal Development*. It affected attendance, motivation and therefore the importance attached to it by the students. The effects of assessment on the students' approach to the course will be appraised later. In terms of course content, the use of the Kelly grid with Design and Media Management students was another differentiating factor. There were also more superficial yet notable differences between the courses. The *Personal Development* course began in February running through to May and involved the course being spread over 7 different sessions with students being able to attend any one session out of a choice of 4. Meanwhile the *Process of Learning* course began in April with 4 sessions of 3 hours being conducted over 5 weeks and the students all together, as each individual session was run once only.

The aims of both courses were to engage the students in 'critically reflecting' upon their experiences of learning on the first year course and to see if they could suggest what this process might imply for their learning. In this way, it was hoped to address the difficulties expressed by writers concerning the usefulness of and method of teaching critical thinking. Teaching methods were chosen to encourage student reflection and discussion in all sessions. For example, students might do poster presentations, or become involved in structured group discussion.

To this end, the course was divided up into three integrated parts. The students would reflect upon their learning experiences in year one in two ways. In part 1, they would appraise learning activities that they engaged in, such as working in groups versus working alone. In part 2, they would begin to reflect upon their 'experience' of knowledge/information such as the nature of expertise or the construction of theories. The



final part required the students to explore the implications of what they had learnt. In order to integrate the three parts of the course as much as possible, the second and subsequent sessions began with a reflections session in order to engage students in looking at the personal implications for them of what they had learnt as well as recap on what we did the week before.

Teaching of the course could best be described as facilitating, where students were encouraged to work in groups and explore the topics in the sub-sessions. This teaching was difficult as I intentionally did not wish to 'teach from the front'. Rather, it was important for the students to be involved from the start in exploring these issues themselves, from personal experience or knowledge. Experience in teaching here is influential. It was challenging work combining teaching with evaluating the course as will be seen later in my diary accounts.

In the *Process of Learning* course (but not in *Personal Development*) however, the students were required to elicit a personal construct grid<sup>19</sup> (based upon the work of Kelly, 1955) that examined their perceptions of the Design and Media Management course as a whole in terms of teaching, knowledge, content and so forth. The students were to elicit any constructs that were important or salient to them. Appendix V represents the handout given to students on the course content of the *Process of Learning*.

Appendix VI outlines the *Personal Development* educational programme as presented to students on the Psychology in the Community course in 2/9. This thesis evaluates the *Process of Learning* educational programme only. *Personal Development* ran concurrently with Psychology students and enabled me to build up my experience of running such a course. In the following chapters, I present and analyse the data obtained from students studying the *Process of Learning*.

---

<sup>19</sup> See Design and Media Management Session 1 analysis

## **6. Staff and First Year Students' Experiences of Learning on Design and Media Management. Implications for the Design and Evaluation of the *Process of Learning***

### **6.1 Introduction**

This chapter describes the learning experiences of students being taught at Thames Valley University<sup>16</sup>. They were completing their first year of study on a course entitled Design and Media Management. The course combined media, design and management studies and claimed at the time on the prospectus to be a unique course in providing this combination. The students reactions both intellectual and affective are explored<sup>17</sup> in the first section of this chapter.

Staff who taught on Design and Media Management year one were also interviewed. They came from a variety of backgrounds - psychology, design, photography, statistics. The feedback from these students helped me to understand the context of learning within the Design and Media Management department<sup>18</sup>.

In this chapter, I present and analyse the main issues that promote and inhibit student learning as well as the factors that affect staff development on the Design and Media Management degree course. All interviews informed the subsequent design, implementation and evaluation of the *Process of Learning*, which was implemented with subsequent first year students in the 1992/93 academic year. Furthermore, the issue of confidence in learning is discussed in chapter 3. Responses from the interviews present us with a greater understanding of this aspect of learning and the factors which promote or inhibit its development.

*A brief description of the college* - The college in which the interviews and subsequent research were conducted, was undergoing important changes at the time of the interviews in May and June 1992. The college had joined with Slough University and was undergoing a transition in identity, firstly becoming a polytechnic for a brief while, before then becoming a University. The amalgamation broadened the scope and choice of curriculum for incoming students. There were also changes being implemented in administrative, and pedagogical structures with a shift towards modularisation of courses

---

<sup>16</sup> Interviews were conducted in May/June 1992. These students were a year ahead of the students who were taught the *Process of Learning* in 1993.

<sup>17</sup> Semi-structured interviews

<sup>18</sup> I refer the reader to chapter 3 where I explain the purpose of these interviews.



and implementation of FLIS (Flexible Learning Information Systems). Many of the changes were met with resistance by members of staff in different faculties, which on a more formal level involved the teaching unions. Many staff were anxious about the changes underway and questioned where the college was being directed and what their role in the new college might be.

The Design and Media Management course combines subject disciplines from media studies, management and design. At the time of interviewing it was considered a unique degree (in higher education) in providing this combination across departments.

## **6.2 *Methodological Commentary***

In the interviews students were asked about their experiences of learning on 1st year Design and Media Management. A number of students were interviewed in depth, numbering 12 in all from a class of approximately 60. Announcements were made in class requesting interviewees and students were also approached individually during studio work with the consent of the lecturer. The students agreed to be interviewed on a voluntary basis and the responses were transcribed.

The interviews followed a semi-structured format with flexibility to discuss issues that were raised by the student that appeared relevant. The main themes or questions included in both interviews with students and staff are incorporated into this chapter, followed by corresponding illustrative quotes. The views expressed by the students help describe the experiences that students have in studying Design and Media Management in terms of learning.

While some student responses are individual and may only reflect a unique point of view on an issue being explored, there are responses from students in which there is consensus across the sample interviewed. Both responses have their place in this report, and I have attempted to describe most of the responses while indicating whether it is an individual or consensual response. The words 'students' and 'others' refers to the views of more than one interviewee. Staff were interviewed mainly in May/June 1992 as well. All staff connected with teaching on Design and Media Management year one were contacted. The majority of staff agreed to be interviewed. Three members of staff declined to be interviewed for personal reasons.

This chapter is broken into three sections: In 6.3 the experiences of students learning on first year Design and Media Management are described followed in each case by quotes from the students. Quotes from a number of student interviews are used to illustrate the

issues raised in the students' own words. In 6.4, the teachers perceptions of the course and their relations with students, fellow members of staff and the college are described. Then in Section 6.5, I analyse both sections and draw conclusions which then informed the design of the *Process of Learning* course. Here I explain how these conclusions helped inform the design.

### **6.3 Interviews Conducted with Design and Media Management Students, June 1992**

#### **6.3.1 Reasons for Studying at Thames Valley University**

There were a wide variety of motives for students coming to Thames Valley University to study Design and Media Management. Some students had enrolled by chance or by accident after hearing about the course from a friend for example. Clearing through UCAS had permitted many students to choose the course, having been turned down elsewhere in their first choice. One student stated that it suited her interests. Other students were looking for a change in career or improvement in their career prospects.

#### **6.3.2 Students' Impressions of the Design and Media Management Course in First Year**

I asked students what their impressions of the course were. There were mixed reactions amongst students in how to deal with this responsibility which entailed the student choosing the work that they would like to do and then being left to carry out the subsequent research themselves. One student wished to leave at Easter, another student suggested that the younger students would fare better if they were given more direction in their learning and less freedom.

s1<sup>19</sup> .....<sup>20</sup>We were told the theories and you decide which is best. We are not taught 'a leads to b,c.' Here you decide.

s7...You have to research on your own, I think the younger students need a better avenue of direction. I think that if you know what you want to do then the course is fine.

s11 DG<sup>21</sup> puts more value on the learning experience rather than what you learn, there are no crutches,..... there is freedom to explore what you are most interested in.

---

<sup>19</sup> s1 Refers to interviewee one, s2 to interviewee 2 and so on up to s12

<sup>20</sup> Indicates omission of some of the interviewees response which was not relevant to question

<sup>21</sup> Abbreviations are used to refer to citations of staff names



The quotes above demonstrate how students were keenly aware of their responsibilities in learning.

### 6.3.3 Perceptions of Teaching Methods

I asked the students interviewed for more information about the type of teaching methods being used by staff. The students responses help to present a more holistic picture of how they were experiencing the Design and Media Management course. There was cross agreement on the awareness students have of responsibility in their learning on this course and the need to come to terms with this. Not all students have coped adequately with the responsibilities that they have been given at this stage towards the end of their first year. They describe having a lot of freedom on the course to learn. One student suggests an irony in that freedom can be both productive and counter productive. There is less 'spoon feeding' going on than A level students may have been accustomed to before coming to college.

s1 Well we are set a task and it has to be accomplished at the end of the morning, like the Prisoner's Dilemma. The course seems to mirror real world scenarios. You are allowed to voice your opinion, as long as you fulfil the final goal. Here in media it is largely creative, because you cannot restrict creative minds, else you will not achieve your full potential and the course must reflect this. It is different in things like medicine and geography, you could not use our system of teaching there, since they are based on empirical historical evidence. We know what we know at this stage, and this is correct and so forth and after that you go off into the real world.

s4 I think that the course is great, it is definitely a change from A and O levels where it was very structured regarding exams. In the portfolio, you have to keep going all the time. This system is much better if you really want to go for it then you can. Unlike exams where it is more hit and miss, how you feel on one day. I prefer it here because it looks at how you are doing across the year, it is a much fairer judgement system. We do large problems in groups, but I feel that there is too much group work and not enough individual expression. Sometimes it is a drag, I prefer one third group work, and two thirds individual work. You have to show initiative when given a brief to do, there is no spoon feeding here.

s6 It is much more relaxed than A levels, each staff member has his own style.

s10 It has not been a course that has integrated the management side with the design side. After all they are supposed to be integrated.

s9 Assessment is on a portfolio basis. It gives you the opportunity to create as you want to. It is

my own ideas that are on paper, more creative.

s1 Personally it is not a problem having the extra freedom. My attitude is that I came back to college to study - I am not interested in student life, I'm here for the degree. I feel that the extra freedom suits better maturity though it is hard to generalise. It is entirely up to you how much you want to put into the course. Work can be done here, and done quickly as long as you are willing to put in a 9-5 working day.

Individual quotes above demonstrate the lack of integration amongst staff in their teaching. One student looks positively at the assessment methods which is chiefly a portfolio method that presents the students work across the academic year. Another student for example, likes the freedom on Design and Media Management in being able to redo a piece of work that had already been handed in for assignment. Students may perceive responsibility in terms of workload, others see the course as trying to model itself on real life. Students with a commitment to study hard having come back to college may be better disposed in coping with the demands placed on students by having extra freedom to study.

#### 6.3.4 Social and Personal Aspects of College Life

There is a rich diversity in students with students from different age groups, school leavers as well as a strong representation of mature students. Also there are students from different ethnic and cultural backgrounds.

s1 The attitude of a 27 year old is so different to that of an 18 year old. We are mixing people from all different backgrounds.

s2 I think a lot of this is about finding out about yourself, getting out and meeting people. I found this hard to do but now I am used to it. It is not the same for others mind you. It is easier to ask questions, to give your opinion, without feeling you are wrong. Lecturers do listen to you compared to A levels where you know you are either right or wrong, here you can actually talk about your ideas.

s10 I am amazed, I thought [to myself that]<sup>22</sup> they are not going to get me doing this, yet with Human Resource I am amazed, by putting us under pressure, by getting us to draw on our own experiences, to compare real life experience with what the experts think; to realise that the experts are not agreed with our experience - I think that it has worked for me. One thing I am not sure about is self learning, I mean this course is 100% self motivating, the only way to pass this exam.

---

<sup>22</sup> Quotes in square brackets [ ] have been inserted by the author in order to clarify student responses where necessary



**If you do not turn up, no one is going to give a damn.**

Through the quotes above we see how students recognise the diversity of their peers' backgrounds and the importance to them of self motivation in order to progress on the course. There is a perceived sense of pressure regarding workload, and a recognition that the course is innovatory. Students also discuss the relevance and application (to 'real life') of the course. More specifically modules are cited for both good experiences as well as causes of anxiety in learning.

### **6.3.5 Awareness of Intellectual Development Due to Design and Media Management**

Students were asked how well they felt the course had improved their personal and intellectual skills. The benefits and developments perceived by students were varied. Half were clear that they had improved personally/intellectually. Half stated that they were still having difficulty with certain subjects and how they were taught, as they contradicted the espoused aims of the course. There was recognition by students that students preferring a more structured course were having difficulties and that there was a lack of integration of students on the course. The changes going on within the college were mentioned as well as a feeling that there were too many students enrolled on Design and Media Management.

**s7** With respect to exercises it is like a shape, it comes together after doing the exercises on Human Resource Management and then the book starts to fit. There are too many students, I mean the changes are dramatic this year, even L(a lecturer) says it.

**s3** It is a load of myth to think that A level studies brings you anywhere. Personality is important you know its a matter of how quickly you want to learn, if you have a positive attitude you can do it. I think 18 year olds, want to be spoon-fed not motivated. You have to make a choice on whether to have short term or long term gratification.

**s4** The hardest thing to grasp was QQQ<sup>23</sup>, the formal teaching the notes, so it is getting like A levels, whereas with other things you are made to understand the concepts first, but QQQ, it was the concepts that were not really explained. I don't understand it I thought we had left that in the past. I guess QQQ is more difficult to teach - like Human Resource, the only thing is to go through examples, but I feel it could be taught better. If QQQ was more integrated into the course, than I could better understand it. I feel they have to look into this really.

---

<sup>23</sup> A subject taught in first year, which remains confidential according to conditions of the interview being allowed to proceed

s5 I don't think that there is a coherent message coming across from the whole degree, maybe the effort is to make us more in control of ourselves, maybe we are not used to having this responsibility. It [the course] integrates to a certain extent, I mean with the portfolio we choose what we like and in that way it is very good. But I feel that there are problems with this pedagogy for the less motivated student. And for the shy student I see problems [with this pedagogy].

Relevance of course material following a corresponding assignment or exercise was important for several students above. Being able to relate the course studies to the 'world out there', namely the business world was exciting for one student. The choice of working in groups and alone (on the course) allowed students to develop skills of cooperation with peers.

### 6.3.6 Applying Design and Media Management Learning Skills in Other Domains

The majority of students interviewed concurred that the course had improved their understanding and ability to apply the skills that they had learned to 'other' areas of their lives. Not all were specific about the nature of this improvement, instead associating certain modules with improvement.

s3 I attribute my own development away from the course, though the course has given me a better understanding. It has given me a better understanding, not an experts understanding. For example I ask 'Why are they cutting the taxes?' The course has also given me a better understanding of myself, I like things now that I didn't think I would like.

s11 Human Resource makes you question things. Human Resource makes you think in this department, not just to be a good manager and just function.

s No I couldn't believe that there was such a range of viewpoints. I found peoples' viewpoints so different to the way that you think, so I take such with a pinch of salt.

Using the example of 'reading a newspaper' I asked students above, about the nature of this application. They felt that they were becoming more critical of text, photography, and the workplace. Students were also aware of other viewpoints and expressed frustration sometimes in class about being unable to get their point of view across. Doing activities that initially may have provoked dislike may now be looked on favourably by students, coming to realise their benefits.



### 6.3.7 Quality of Tutorials

Tutorials provide an essential link for students in getting feedback about how they are doing on the course. It was evident from the majority of interviewee's comments at Thames Valley University that student numbers in year one had put heavy demands on the resources within the department. The tutorial provision was no exception. Many students expressed the wish for more time in tutorials and more of them. The tutorial was praised by students for providing feedback, clarification of ideas and an opportunity to address queries to lecturers that would not be possible in class. One student had reservations about the tutorial process linked with an assignment marking. She felt that she had been misinformed.

s11 Tutorials are good for feedback, one feels less inhibited then in class to ask questions. But they are so short and so rare - you need more time.

s10 The tutorial is OK, tutorial present written piece, then they give you comments, essential for feedback. It is self motivating, so can have drifters, not seeing staff. Communication breaks down between you and the lecturer and you don't see them again for months.

Tutorials were greatly valued by students as a contrast to lectures, and an approach to teaching which encouraged group discussion. Regarding the frequency of tutorial provision, students commented on the small number of tutorials. In fact tutorials were scheduled approximately on a one to one basis, once every three weeks for up to half an hour.

### 6.3.8 Importance of Developing Skill in Thinking

Students were asked about the importance of having their own opinion. There were mixed reactions amongst students as to the effects that the course was having on their development. Confidence was stressed by students both in terms of intellectual and personal development. For example most students, describe becoming more confident in airing their views as the year progressed. Quotes below present students' views on confidence in relation to their learning and how it can improve on Design and Media Management due to the pedagogy.

s1 If you have no opinion then you do not have an awful lot. The stronger your belief the happier you are to be. Those with less opinion are carried along by the group decision.

s2 I am an A level student. Yes the course does encourage one to form an opinion. It improves in

years 2 and 3. I am sure. Ideas are always welcome , that is what I think. I am always prepared to listen [the staff that is]. I feel that this course is geared towards making you more confident. There is a lot of difference between me before and after course. My confidence has improved. When I first came to college it was a daunting experience , you really have to exert yourself when you come to college.

s4 The course encourages you to have your own opinion, you do it in the exercises. You are encouraged to have an opinion. The message hasn't been driven home, but has been insinuated that you must express it, but express it fairly in group in Human Resource Management. As the year progressed you are more likely to express your own opinion as you get to know people, but it has also improved on the course via teachers and tutors.

s5 The course is not directly encouraging us to have our own opinion, the DG statement is all very nice but it uses language that uses psychology speak, we were not familiar with psychology speak. Still people, who you feel intimidated by, you feel they don't want to be bothered by you.

A changing perception of authority was described by one student who had come straight from A levels at school. For her it was as though they were playing on level ground rather than being a restrictive force as in A levels. In other words she felt that her opinion was more highly valued in college. With this has come an increase in confidence. However the same student felt that the lack of opportunities for socialising with fellow students limits social interaction, leading to cliques for example.

### **6.3.9 Responsibilities of Students and Teaching Staff in Learning Context**

I finally asked the students what they felt the respective roles of staff and students should be in the educational process. The relationship with staff was important to many students. It was important to feel relaxed with a member of staff. This was possible if staff were willing to be approached, and that the student felt free to make mistakes, a movement from authority to equality with respect for the teachers' knowledge of the discipline. The students should be encouraged to provide feedback to the staff about their teaching methods according to one student and should be motivated to work. Feedback is seen as a two way process by the students that I interviewed. The absence of exams is perceived positively by one student in that it reduces competition amongst students. As we have seen already the students described other advantages they felt in connection with portfolio assessment. The following quotes capture these themes most adequately:

s1 The teacher student dialogue is a two way process, staff must be willing to be approached after teaching time.



s9 I find it really easy to ask questions, and it is not as though they are above you, it is a more personal less authoritarian [atmosphere], it is not as though you are at school.

s2 Learning has less to do with the student knowing nothing and lecturers knowing everything. I think when you get to this level you have to start questioning. I think lecturers should not be there to tell you what you did right or wrong, I think they are there to help you, discuss things with you. Being able to experience things rather than text book learning is good, that is what I like most.

s3 This course actually makes you see things in a different light. In A level there was competition, whereas here because there are no exams, it is nice to hear other people opinions. People should always feel relaxed in a class, it doesn't matter if you get things wrong, you should try a question.

s4 For the teacher it is important to have respect for his authority, but you have to work on the same level as the teacher. It never works if you feel they are far more important, I mean calling them by first names, makes a big difference, it makes you relax more. They have got to have some control over things; authority is important, but at the same time it must be accessible, and on a friendly, less threatening basis. One must be on a level with your teachers. The course is more like real life, it is good to make mistakes here, so that when you make them in real world you know how to deal with them.

s12 Rather than the teacher as master and the student as servant, I have a view of the teacher as a friend, someone you can tell, 'I don't understand this', and to have the confidence to treat the lecturer as an equal, or to realise that their job is to give you the knowledge, rather than them shouting at you saying why don't you know it. So respect for each other is important.

Confidence for the student is linked with being able to perceive the staff as an equal. The theme of equality and respect figures strongly amongst the responses of the students that I interviewed.

In 6.5, I analyse the above findings and discuss how they influenced the design and evaluation of the *Process of Learning*.

## **6.4 Interviews Conducted with Design and Media Management Staff**

### **6.4.1 Teaching on Design and Media Management Year One<sup>24</sup>**

---

<sup>24</sup> Interviews conducted in June, 1992

I asked staff about their experiences in teaching on Design and Media Management year one. Most staff here spoke in terms of their own subject area teaching, for example sound, accountancy, marketing, and photography. Developing a philosophical approach to the knowledge was necessary according to one lecturer. One member of staff described the course as evolving, that Design and Media Management is a course undergoing refinement. There is not much contact time between staff and students. One problem suggested was the pressure caused by large student numbers.

t1<sup>25</sup> It is Marketing led, also we have accountancy and law. It is about getting the student to think laterally. In the first year we cover the subject principles, in the second year strategic issues and then in the third year the course combines business, ethics, marketing, organisation with respect to product development. It is a developmental process. The question asked is how can philosophy be applied, to get the students to think about philosophy and how it can be applied.

t6 In first year all courses are evolving events. Design and Media Management is at the other end of evolving, with much less rigidity. We take student needs and employers into account. We modify our objectives during the year however.

One member of staff describes teaching along 'traditional lines' because it is felt that the subject<sup>26</sup> inherently requires this type of factual dissemination, described as a 'how to do' subject.

t6 It is not looked at in terms of weeks but a diary of events is the focus. It is not organised strictly along a lecture/seminar framework. But there is an understanding that they [students] will be issued with a diary, and we make mutually agreeable times with the group, so we negotiate with the group.

t4 There is an underlying commonality between Psychology in the Community and Design and Media Management. We use the self selected portfolio. The underlying rationale is that if the student is to engage in a meaningful way in education then they must participate and learn from each other. They must have the freedom to learn before moving on to a more formal stage.

The Design and Media Management course was described as being multi-disciplinary based, emphasising the student learning experience as central to the curriculum.

---

<sup>25</sup> t1 refers to teacher one throughout the chapter, and likewise with t2, t3, t4 for subsequent teachers interviewed.

<sup>26</sup> Interviewee requested confidentiality on subject name



## **6.4.2 Perceptions of Student Competency in Learning on Design and Media Management**

Staff were asked what they felt constituted 'competency' in the assignments that students had to do across the various disciplines. A rich variety of competencies were described often with differing priorities and levels according to the subject or module. On a subject specific level, students were expected to be able to have mastery of practical skills associated with the subject such as tape editing, or learning the process and language of photography. Another member of staff described the importance of developing general skills such as knowing how to use the library, or of taking the initiative. He also stated the benefits of doing project work on a multidisciplinary degree, in that it develops reasoning processes, presentation skills, that team work is essential and that it is done in cognisance of the students entering into a highly competitive environment upon graduation.

t4 It is important in learning for the student to be independent of lectures and text, to see knowledge as a social construct. The student must appreciate that knowledge accumulates and changes and must not rely on secondary sources. She must form her own opinion from primary sources of knowledge, to form her own judgement. Remember the story is not worth telling unless you trust the story.

t1 Like DG to be aware that the world is an ever changing place. They need to be questioning, questioning of world, models, also need to be able to write and to communicate orally and visually. They must also show persistence. In the real world they need to be able to work with others.

The quotes above demonstrate the wide variety of skills described by staff as reflecting competency. There was consensus amongst three staff members in that they sought an 'epistemological engagement' from their students. In other words, students must become aware of how knowledge is formed and learn to be critical in their appraisal of it. With this critical development comes a developing sense of independence for the student from text and lectures, rather than a dependence or acceptance of knowledge presented on the course as fixed, or seen as right or wrong. It is important for the student to examine the process of their learning and to relate their learning experiences to the world outside. A number of extracts above illustrate these issues.

## **6.4.3 Factors Influencing Competency in Learning on Design and Media Management**

I asked staff whether the students were developing the competencies described above or instead having difficulties studying the course? Responses from staff suggest that there are

organisational and resource issues and also problems in terms of students' orientation and expectations of the course. Students may experience anxiety in learning to change to meet the pedagogical demands of the course. There may be difficulty for students who have been used to structured, high contact teaching - in first year Design and Media Management they must learn to become more self motivated and more analytical. One teacher felt that mature students were better able to cope with the demands of the course. Student motivation was cited as a key factor in determining how a student would develop. A highly motivated student will adapt favourably to the demands of this student centred course.

t4 There was Angst, not answers but questions is what they [ the students] get.

t2 There is a great variety in student approach over the course. They contrast ideas to a degree. Some students work just to pass the degree, others initiate their own work. There is greater diversity, mature students are better equipped, regarding school leavers I am less sure.

Problems on the course consisted of staff being overloaded with work, class sizes being too large, and a resistance by students to the changing learning environment. For example, the student moving away from a structured teaching environment towards a student centred environment.

#### 6.4.4 Perceptions of Learning Objectives in First Year

Has the course with its content, organisational structure and espoused pedagogical style facilitated the intellectual process? There are many considerations to be made in addressing this issue that involve the student, the staff and the resources of the department. One teacher argues that only so much can be achieved in first year and that it involves more a 'sensitising towards issues'. He argues that the concern should be with the quality of the interaction more so than the totality. On an individual basis, the student's own motivation is a strong determinant of how well s/he can develop. Logistical problems arise because of the large numbers of students on the course in first year.

t6 I would say that it has been very encouraging compared with students that have learned in a less student centred, more didactic, conventional form. For some students of course, namely the less confident ones the didactic way is better, safer for them. There is a risk side to this pedagogy and that is that the students that most need help are the ones that may be the least likely to approach you. Clearly the responsibility with this pedagogy lies with the student. It gives the course much more potential. We have left it to them to define what it is their goal. You have not told them how to do it. More freedom implies that there are more mistakes and more learning. In our course the student



is engaging in that type of process. The PhD process in a sense. There is uncertainty which causes angst [for the students].

It was important that the student must show initiative and a willingness to try things out on the course, and become aware that the course entails much freedom and responsibility. They should realise that they might find themselves lost initially on the course but will learn a lot from the process, gain a rich variety of learning experiences and skills relevant to work. Because of the work demands of the course, members of staff would advise school leaving students to go away and work for a year before embarking on the course, and/or to question seriously whether the course is the right one for them. It requires more than academic ability, an active interest in the discipline areas is also deemed important. Take the following quotes for example:

t4 Students should try out things, start with an open mind, non traditional. They might at start find themselves lost, but they will learn a lot from the process. Open ended exercises in order to engage in the processes. Some questions are unanswerable after two thousand years, so they will not solve them overnight. The idea is to make the questions simpler.

t1 Tell the students to forget it if they think it is going to be a doss. We work them hard here, just like in industry. I think what they get in it, they work hard together, to very exacting briefs, that they will have worked with all nations all backgrounds, prestigious live clients, they will have rubbed shoulders with rich poor, and what they get out of the course is a welter of experience appropriate to the world today.

t6 I would describe to them the way we teach as I have described to you. Student driven is the current rhetoric. There is much freedom and responsibility. Prepare for it, and give it a chance.

One staff member above was encouraged by the progress made through this less conventional approach (that is less teacher centred, less didactic). But he pointed out that for less confident students a more didactic approach might be more suitable. On first year Design and Media Management the responsibility lies with the student he says. This can have a risk element. Telling the students that there is ambiguity (not right or wrong) in learning, poses epistemological challenges for the students some of whom might not cope as well. The result may be anxiety for the student, a sense of uncertainty, and that there is a superficiality about the course.

For one member of staff this becomes an ethical issue, the apparent contradiction between presenting to the student the concept of epistemological ambiguity in what they study on the course, while at the same time remaining an authority to the student. In the students' perceptions, this will not go away. The issue he says concerns how far you can go with

this ambiguity before it becomes counter productive. For example, if all aspects of the course that the student learnt in first year were fair game for critical examination then this might lead to confusion - all his her expectations being overturned in the extreme situation. In conclusion he thinks that there are far greater risks with open ended teaching then with teaching along structured lines.

#### 6.4.5 Improving Design and Media Management Pedagogy

I finally asked Design and Media Management staff about what they would like to see changed in any area of the educational process as they experience it within their department at Thames Valley University. There were many suggestions for improvement. A key issue for almost all those interviewed was the need for more integration between management, design and media parts of the course. There were different ways in which this could be improved. Integration at the course level and in assignments, which required the students to bring together knowledge from the different areas was very important. Staff development had been marginalised at the college. Loyalty to the college had been reduced as a result of the radical changes that were occurring during the year. Integration could be improved both within management as well as across the disciplines. More communication was called for between staff, as the following quote illustrates:

t3 The fragmented nature of the course is both good and bad. It is a very good course since it develops business and creative skills. This is a unique course, unlike my education. The fragmentary nature works against student of media design management. There is not a lot of communication across staff of the 3 disciplines. There is a lack of communication, but it is the same wherever 2 departments are involved. Staff commitment therefore is essential. The institution is trying to standardise across the course.

t2 With respect to the media areas of the course there are problems of accommodation and facilities. These problems need to be addressed. The new learning centre would really help Design and Media Management. The other problem on the course is separation. It is disruptive with some teaching at management. Integration is needed at the course level [management integrated with media], at the staff level, and at the accommodation level.

t5 We need to have more integrated assignments. Also education is about different perspectives. It starts with the student realising that there are different perspectives to a problem.

t6 Integration. Most of all I would like to see integration between the two parts, the management, design and media parts. Like today at the Breakfast Show<sup>27</sup>. Secondly, would like to see much

---

<sup>27</sup> Here final year Design and Media Management students display their final year projects to the public



more integration on the management side as well. In order to achieve integration I would have to go through their work myself. Impossible, no resource allocation for that. Enormous. We pay lip service to integration but that is it. It annoys me to assume that it is not a significant issue.

t3 Flexibility is important but so too is structure. I think first year needs more structure. The mature student also needs a framework to identify with in first year. I would like a more gentle approach to the student centred approach. I would like to try persuade student to see the staff point of view, this is lacking in the student, they need more structure, especially with the numbers. I do find that students take on their own pace once they are given the structure. there are comments from essays that they found it useful to have a framework though the framework went out the window by the end of the first year. The difficulty for the student is the open endedness and the freedom. If it is too open ended, with all student doing work at the end of the course, it just breaks me up. With respect to integration, there are so many staff and institutional changes, and management structures changing, that staff do not have much time to come together to discuss integration. The opportunity to sit down and discuss integration does not happen because of the demands that the institution places upon us. It only happens at the pub....

One teacher we see above, conceded that lip service was being paid to integration, another stated that teachers have their own style of teaching and are free basically to teach what they want, an attitude which might contradict the espoused aims of the course and the impression that the course was integrated. One staff member expressed the wish that exams be scrapped, and that the focus be made on emphasising research and decision making skills. Students needed to be more empathic to teachers' concerns while at the same time this teacher expressed a wish to use a less student centred approach as the open endedness and freedom was difficult for students.

In 6.5, I analyse the findings above and discuss how they influenced the design and evaluation of the *Process of Learning*.

## **6.5 Analysis of Staff and Student Interviews and Implications for the Process of Learning**

### **6.5.1 Introduction**

I described the framework for conceptualising student learning experiences in Chapter 3. From the interviews with students and staff in this chapter, it can be seen that elements of this conceptual framework are useful in describing the experiences that students studying this particular course have had. How student responses influenced the *Process of Learning* course design, will be discussed here. Staff experiences of the course will then be

described. Finally by comparing both sets of responses, I will illuminate the context of learning for Design and Media Management students in their first year of studies. Conclusions will then be drawn on how these responses helped inform the design and evaluation of the *Process of Learning*.

Further insights into how confidence in learning is developed in higher education is also discussed here. This element of learning was introduced in chapter 3, and is a separate issue to the central question of this thesis. However the findings are worthy of analysis.

### 6.5.2 Summary of Student Findings

In terms of orientation to studying the course, there is great variety in the twelve students' responses here. Geographical location, coming back to study in order to improve one's career prospects, wanting to study the degree because of its unique and holistic combination of subjects, getting accepted through clearing and learning about it by chance reflect differing maturities and motivations to studying the course.

Students interviewed were experiencing mixed reactions to the course. For young students, it was a big change from what they had experienced before at A level study where they had found courses far more structured and didactic. On the Design and Media Management course, they were coming to terms with having greater responsibility and freedom in their study. Not all students were coping well with this change. One mature student made the point that learning on this course provided great potential, as long as the students were committed to accepting greater responsibility for their learning. This often required overcoming resistances to change. Evidence from the interviews suggested that younger students might have greater difficulty working in an environment that required them to take on more responsibility for their learning, such as planning work.

Tutorials were well received by nearly all students interviewed with a wish by most for more contact of this nature. The portfolio assessment was also well received as a far more effective and reasonable method of appraising the students' progress across the year. There was praise on an individual basis for teaching styles of particular staff while at the same time there were complaints about others. Some but not all teaching styles therefore were congruous with the espoused pedagogical aims of the course as provided in a document to students.

A quarter of students had concerns with the perceived lack of integration between subject discipline areas, stating that each teacher was basically given free rein to teach in his or her own style. This teaching often contradicted the literature students had received on the



espoused aims of the course, which aimed to encourage students to take more responsibility for their learning. The didactic teaching on the course by several staff members was one manifestation of this contradiction. So, the espoused pedagogical aims of the course did not necessarily occur in practice.

There were problems with lack of co-ordination across disciplines which students were aware of, despite expectations that it was a unique degree. For example doing assignments that combined elements or knowledge from the various disciplines was proposed. There was also a lack of integration amongst students because of numbers and also because it was a London college. Other causes of anxiety for students were the need for more contact, the quality of feedback given and the need for more, and doing group work which was often difficult because of conflict within groups.

The diversity of students is notable for the course. Students studying Design and Media Management vary in age, country of origin and cultural/ethnic background. How well this is recognised by staff and seen as a potential resource remains unclear. Amongst the students I interviewed, there were students of different ages and maturity, cultural and national background.

Confidence has been described as an important element of students' learning in chapter 3. The interviews presented in this chapter provide further insight into the issues that promote or inhibit a students confidence in learning. Three quarters of students interviewed discuss this dimension to their learning with quotes from seven students provided above. It was important to students that course material was relevant to the students personal life as well as a future career. This awareness by several students reflected increasing confidence. Confidence also developed from the student becoming more critical in their thinking. The students' relationship with authority was an important determinant of confidence.

Confidence involved a reciprocal respect wherein staff are respected for their knowledge and understanding of the discipline, while the student feels that s/he also commands the teacher's respect. Developed further this is phrased as equality between teacher and student as crucial in developing the students' confidence.

### **6.5.3 Summary of Staff Findings**

The six staff interviewed, perceived Design and Media Management year 1 as having wide subject variety. The contact hours are minimised (students being 'encouraged' to work on their own). The course is multidisciplinary and evolving. The course is undergoing change whether in assessment structures, teaching. Students are taught in a variety of

ways, including group work, teaching from the front as in traditional lectures (didactic), tutorials and diary assignments. The wide range of approaches to teaching could be problematic for students, as teaching methods could sometimes contradict each other and 'contradict' the espoused pedagogical aims of the course.

The student must be competent in a number of ways in order to be successful on the course. According to staff these competencies include mastery of practical and general skills, to be able to apply what they learn, and to develop an engagement with knowledge structures (epistemology), sophistication of which may be seen in terms of independence from text. This posed an ethical problem for one staff member concerned with the ambiguity students experience from being taught on this course to doubt. He had problems equating this when brought to an extreme with the position of authority he held as teacher.

Organisational pressures and practical resources (limitations) influenced the quality of teaching. One teacher felt that achievements were limited in year 1 in terms of how much a student can learn. Students' motivation, maturity, workload and expectations of the course can determine the outcomes or quality of their learning. Students may resist the workload or responsibility placed upon them. Resources of the department influence the quality of learning. In this year for instance the huge intake in student numbers put tremendous pressure on staff.

Two senior staff<sup>28</sup> felt that it was important chiefly for the student to be aware of the freedom that they have in their learning and the concomitant responsibility that comes with that in terms of organising and conducting their work. They must be aware that this entails greater workload, resourcefulness and showing initiative. For four<sup>29</sup> staff it was felt important to integrate more, to have more communication and collaboration with staff across the 3 disciplines. This was the chief issue for staff.

## **6.6 Comparison of Teacher and Student Perceptions and Implications for the Process of Learning**

The research here emphasises the importance of examining the complex factors that influence the students' learning. These factors we see, operate at different levels within the department and college. Secondly, it has helped to extend our understanding of the theme of 'confidence' in learning within the student learning conceptual framework.

---

<sup>28</sup> t4 and t6

<sup>29</sup> t2, t3, t5 and t6



### 6.6.1 Integration

The importance of integration, amongst staff and across disciplines on first year Design and Media Management teaching was prioritised by both staff and students. Staff agreed that it was crucial for them to have more knowledge and understanding of each others work. Such development would have its benefits such as in more collaborative work across disciplines. For students the perceived lack of integration was a problem because it contradicted the espoused aims of the degree. Students were also aware of the lack of co-ordination across disciplines.

In designing the *Process of Learning* I therefore explained the nature and purpose of the course to staff. While not being possible to form collaboration with staff<sup>30</sup>, an important part of the evaluation of the *Process of Learning* concerns how this might be achieved, in order to implement critical thinking onto the curriculum. I designed the course learning activities so that they reflected the espoused pedagogy of Design and Media Management namely a student centred exploratory form of learning. This is reflected in the student activities on the *Process of Learning*.

### 6.6.2 Reflecting the Freedom to Learn on Design and Media Management

The course was described as being in a state of evolution as some staff consider new ideas for teaching and assessing. This must be seen as a positive situation where the course is under appraisal and staff questioning its direction in order to improve the quality of student learning. One very strong theme in the teaching on Design and Media Management is the notion of freedom, an issue addressed by students and staff alike in this research. For staff it was important for students to become aware of the freedom that they had in directing their own learning and the responsibility that was required in order to be competent in this. For students coming from a structured learning environment the transition towards taking up learning responsibilities on Design and Media Management can be difficult.

Students interviewed had pointed out that the course was difficult for the less mature student or school leaver, due to its less structured teaching style. As a result of this information I set out to evaluate the *Process of Learning* by interviewing both school leavers and mature students studying on Design and Media Management. This would reveal whether mature students might be more suited to such a course than school leavers. More specifically the evaluation considers the benefits for students according to their conception of learning<sup>31</sup>.

---

<sup>30</sup> The course ran only for one semester

<sup>31</sup> Discussed in chapter 3

In designing and ensuring the integrity of the *Process of Learning*, I realised that the course would have to reflect the ethos of an evolving Design and Media Management course while also emphasising to more 'conservative' students how the *Process of Learning* was relevant to their Design and Media Management studies. I anticipated that several students might be anxious about a course which while being exploratory, sought to improve the quality of their learning on the course. For example, a student who studies Design and Media Management only for the qualification is more likely to resist studying such a course as it serves no purpose (as they see it) in achieving their end goal. The interviews revealed such perceptions, where students were resistant to the Design and Media Management pedagogy initially but 'warmed' to this pedagogy more as they accepted the responsibilities for learning placed upon them.

### 6.6.3 The Concept of Ambiguity in First Year Design and Media Management Pedagogy

For three staff there was concern here with how they were expected to teach on Design and Media Management. Students were introduced to 'ambiguity' on the course. In other words, they were encouraged to question the merits of ideas presented on the course and not to accept them at face value. This commenced with their first year of study. This raised a conflict of interests for teachers. On the one hand they were perceived as authority figures by students while they proposed on the other hand that the student should doubt 'authority and authoritative knowledge'. Another important issue here concerned how far one could go with ambiguity in teaching the knowledge of a discipline. This was perceived as an ethical challenge for one staff member.

Feedback from the interviews guided me to explain as thoroughly as possible the aims of the *Process of Learning* to students. The *Process of Learning* contained elements which also questioned the quality of information coming to us<sup>32</sup>. I therefore perceived the need to assuage the concerns of students who were having difficulties with the ethos of Design and Media Management. It is helpful here to remember that the *Process of Learning* was an assessed part of the course. This was vital in order to ensure a high attendance<sup>33</sup> of students. The evaluation of the *Process of Learning* included an analysis of students' learning experiences of questioning the authenticity of information and concepts on their first year studies.

---

<sup>32</sup> This is an example of a critical thinking skill

<sup>33</sup> In *Personal Development*, the course was not assessed and consequently attendance was poor.



#### **6.6.4 Applying Critical Thinking to Other Domains**

In the interviews students mentioned the importance of applying ideas and concepts to work related areas for example. We saw (in chapter 3) how educators disagree on whether critical thinking skills can be applied to other domains outside of the subject area in which they are taught without the corresponding subject knowledge. In the design and evaluation of the *Process of Learning* I respond and contribute to this debate.

#### **6.6.5 Expectations for the Process of Learning in First Year Design and Media Management Studies**

A teacher described first year Design and Media Management as 'sensitising' students towards the curriculum and teaching methods of Design and Media Management. This can also be said of the *Process of Learning* content and timescale where I aimed to introduce and develop students' critical thinking skills over one semester. There were several factors emerging from the interviews which could not be facilitated in the design of the *Process of Learning*. These include, the pressures that students were under in terms of workload on the Design and Media Management course and the teaching methods on different modules which contradicted the ethos of Design and Media Management. Furthermore, staff were also under considerable teaching and administrative workload pressures, so seeking cross subject collaboration would require greater timescales and resources. In evaluating the *Process of Learning*, students were given scope to suggest how the quality of their learning experiences could be improved on Design and Media Management and the Process of Learning. Students had the opportunity to do this in the assignment as well as in the interviews.

Staff development and loyalty to the department and college, staff relations and collaboration, departmental resources and student numbers, are all factors that illustrate how the organisational resources and politics may affect the quality of student learning. Pedagogical rationale also influenced student learning in different ways according to the student motivation and orientation. Many students found the responsibility for learning difficult to accept in the first few months. The purpose of these interviews was to help me understand the context of learning for Design and Media Management students in their first year of studies. I described this context by interviewing both staff and students in Design and Media Management. I then analysed the findings and explained how they influenced the design and evaluation of the *Process of Learning*.

It should be borne in mind that this is the first year of studying for the student and for many it may be a transition year coming from A level study or from work. The progress and

development of the student in second and third year may put first year student reactions into perspective. However, the impact of the issues raised here, are considered in the subsequent chapters in terms of how they can inhibit/promote the development of critical thinking in higher education in the UK

## **6.7 Confidence in Learning in Higher Education**

The importance of confidence in successful learning was discussed in chapter 4. In the interviews here, three quarters of students' responses provided further clarity on the factors which promote students' confidence in learning. Increasing relevance of the material studied to the students' lives and to the potential career that they might take up, can lead to improved confidence in student learning. In other words the purpose of course and the assignments must be seen to be relevant to the student. This is especially important where students have a personal or vocational orientation to learning. The implication of this for teachers is to communicate clearly the justification for including particular course content and assignments.

A professional relationship with staff was important for student learning within the student/staff context. Confidence was enhanced when the student felt that his/her opinion was respected. It also had a reciprocal nature wherein the student respected the staff for their knowledge. This does not suggest that didactic teaching inhibits confident learning. More, it deals with the personality of the teacher and his/her professional relationship with students. It requires an dialogue with staff where students are encouraged (by staff) to give their opinion on concepts learnt according to their present knowledge and abilities.

This research describes increased confidence in learning being linked with developing a greater understanding of ideas and concepts and how they are formed. Initially students may be anxious in learning that ideas are not absolute in terms of right or wrong. It requires a transition to determining the strength of concepts and theories according to criteria such as empirical support and observational studies which support one theory over another. As students become more skilled in this engagement their confidence increases in learning course materials. This was illustrated by students interviewed who came to favour the radical Design and Media Management pedagogy as the year progressed, yet were hesitant initially. This epistemological engagement is also described by staff as an important element of competency. For the student to be competent s/he must engage the knowledge and become more sophisticated in their awareness of how knowledge is constructed. Personal involvement from the student is emphasised as this leads to student independence from the text.



This section has expanded the concept of confidence in student learning in higher education. Educators can help improve their students confidence in learning through:

- clarity on the relevance of curriculum and assignments to students
- creating a group and one to one dialogue with students which encourages respect for the opinions of student and teacher
- encouraging students to engage the epistemology of the curriculum in their first year of studies

In the chapter 7, I describe and analyse the students' reactions to the *Process of Learning*.

## 7. The Process of Learning- Description and Analysis of the Course Sessions

### 7.1 Introduction

As described above, the *Process of Learning* ran for one semester as an introductory course on critical thinking skills. It incorporated examples of critical thinking skills according to the four domains of critical thinking defined by Paul and Nosich (1991)<sup>34</sup>. The course also included a section where students reflected upon their experiences of learning activities, such as assessment for example. The final section of the *Process of Learning* encouraged students to address the implications of what they had discovered as a potential vehicle for improving the curriculum. In order to integrate the three parts of the course as much as possible, the Sessions<sup>35</sup> two to four<sup>36</sup> included a reflections part at the beginning of class. The aim of this was twofold: to engage students in looking at the personal implications of what they had learnt; and to recap on what we did the week before.

Teaching of the course can accurately be described as facilitating. Here, students were encouraged to work in groups and explore the topics in the sub-sessions. For example one activity used was structured group discussion. Northedge (1975) suggests facilitating discussion by reducing the size of the groups and thereby overcoming the social problems of groups. Then he puts forward his format for group discussion which incorporates the following successive stages:

- individual work
- work in pairs
- small groups
- finally reporting back to the group

Northedge found that students said they enjoyed the discussion more, that the amount of participation from the quieter students was markedly increased and that the *quality* of the arguments improved considerably. For Northedge the prerequisite to group discussion is

... a general approach which places emphasis on setting up a supportive social system as a first priority for a discussion group. Controlling what is actually discussed can be dealt with once the group has come to terms with its social problems and is a fairly cohesive and constructive body.  
(Northedge, 1975: 17)

---

<sup>34</sup> These elements or themes were further determined by a survey I conducted of previous innovations in critical thinking.

<sup>35</sup> Here, 'Session' refers to a complete 3 hours teaching. This comprised of four sub-sessions.

<sup>36</sup> See Appendix V for view of full course details



(The importance of group discussion is discussed by Portes, 1985; Kuhn, 1990; also Nastasi and Clements, 1991). Portes recognises the importance of the individual's social historical development in mediating complex mental processes. He argues that skills in speech are critical to thinking:

How speech is used in social interactions will play a crucial role in the formation and organisation of higher mental operations on the individual plane. (Portes, 1985: 4)

## **7.2 *Analysis of the Process of Learning*<sup>17</sup>**

The *Process of Learning* was taught over 4 sessions, 19 and 26 April and 10 and 17 May 1993. For each of the four sessions the framework for analysis is under three main headings, as follows:

- *Aims of the Session*
- *What I did as teacher, what the students did, and the pedagogic rationale*
- *Evaluation: triangulation of feedback from students (written rating of class, myself (diary) and Ella (written comments) the participant observer*

The findings from the four Sessions are triangulated using feedback from myself, Ella and the students as follows:

- In each of the four Sessions, I kept a diary after each class. In the diary I discuss my thoughts and feelings on how the Session progressed in terms of student reaction and contributions to the course. I also kept details of my teaching methods.
- I also asked Ella to provide feedback as a participant observer. After each class, she provided an analysis of student reaction and my teaching methods as she experienced them. Ella was a lecturer at the college, within the law faculty. She was also active within a committee at the college responsible for improving standards of teaching there.
- Finally, each student was asked to rate each Session according to both positive and negative learning experiences. They were also asked to suggest how the class might be improved. Here, responses varied from being very brief each week through to proactive suggestions for improving the class.

In drawing conclusions in section 7.3, I analyse and cross reference the findings from the

---

<sup>17</sup> See chapter 5 where I explain the methods of data collection for this research.

four Sessions. The conclusions are further cross referenced and assessed in light of the findings from chapters 8 and 9 in order to test their validity. The conclusions here form the basis for further investigation in subsequent chapters and finally definitive conclusions are made in chapter 10 according to the support for them across chapters 6-9. In other words, the conclusions made here are possibilities which are then tested for their validity in chapters 8 and 9.

### 7.2.1 Session 1: 19.4.93, Student Attendance 18

The *Process of Learning* was an exploratory course for the student. It was intended only as a starting point, an opportunity for students to begin to become more aware of issues that influence the quality of their learning. In the *Process of Learning* students would look at how they influence and are influenced by both the learning activities that they engage in as well as the epistemic (how knowledge is constructed) issues. The *Process of Learning* provided a beginning for them, to become aware of their own opinions on these issues, to share them with fellow students, and finally to compare this breadth of opinions with relevant literature in the area.

#### 7.2.1.1 Aims of the Session

Following an introduction to the course, the students were required to elicit a personal construct grid based upon the work of Kelly (1955; and in Zuber-Skerritt, 1992) that examined their perceptions of the Design and Media Management course subjects in terms of their learning experiences. The purpose of this exercise was to enable students to elicit assumptions and beliefs that they had about the different subjects on the course by contrasting them. Kerry (1990) states our perception and 'theory' of the world derives from our experiences in the world:

In Kelly's theory of personality the underlying consistency in a person's behaviour is a direct outcome of the way each unique individual builds a unique model of what the world is like. According to Kelly, each person's behaviour follows directly from this model of the world, that is, from the way the person interprets experiences and events. The specific hypotheses we have (at a given time) about the world are called personal constructs. And the framework which acts as a model of the world is called a construct system. (Thomas, 1990: 397)

This exercise (personal construct grid) intended to increase the students awareness of different elements of their learning experiences on the first year Design and Media Management course. Through this awareness and discussion the student could become



more critically aware of those elements of their learning experience that improved its quality. This exercise was first proposed by Chris Dawson, who also taught on Human Resource Management - the module which contained the *Process of Learning*. It was also intended to explore issues raised by students in this exercise in Session four. Figure 2 contains details of Session 1 of the *Process of Learning*.

## **Figure 2 - Details of Session 1 as Presented to Students**

### **Design and Media Management**

**Human Resource Management: Process of Learning, second semester, 1993**

**Time 10-1, on Mondays: 19th, 26th of April and 10th, 17th of May**

**Hand in date for Assignment: June the 17th**

**Facilitator: David Fitzgerald**

In this course, students and facilitator will work together in exploring and reflecting upon the course as a whole. The aim of the course is for you to critically reflect upon the learning activities, teaching and epistemic<sup>38</sup> structures that you experience in your first year studies. The focus is upon engaging your awareness of the learning activities that you engage in, in Design and Media Management year one. By critically reflecting upon these course structures it is hoped that you become more aware of why certain learning activities take place, what leads to effective learning/understanding and discover how you can make the course more personally meaningful to you. Through this awareness, which will be created by partaking in a variety of individual and group activities, it is hoped that you will have a more involved, questioning appreciation of the way Design and Media Management works, and how you might apply it meaningfully. Through involvement with the learning process you may then be able to make proposals for improving the course. These issues then will be the focus for exploration in the assignment. We shall break the course up into three integrated parts for clarity. It is important to see the class sessions as exploratory. Ideas undergo refinement in the subsequent Sessions.

**PART 1: Information: 5-6 sub-sessions<sup>39</sup>, in lessons two, three and four**

**PART 2: Learning activities on first year Design and Media Management: 5-6 sub-sessions in lessons two, three and four**

**PART 3: Implications: Reflections in Sessions 2,3 and 4**

Below is a further elaboration of the issues that we will focus upon. Session 4 will provide you with the opportunity to discuss concepts that have emerged from the exercise on the Personal Grid. Session 1, Monday 19th April

Introduction to the course: The course content, the methods and activities of the course and what you can expect to gain from this course will be outlined here as well as the respective responsibilities of facilitator and students.

Kelly's Personal Grid: an exploratory exercise in which you elicit with a partner your experiences (constructs) of learning on Design and Media Management, first year.

---

<sup>38</sup> For example primary and secondary sources of knowledge, how models are constructed, the issue of expertise

<sup>39</sup> Each sub-session lasts approximately 20-25 minutes



### 7.2.1.2 What I Did as Teacher, What the Students Did, the Pedagogic Rationale

I introduced the students to the course as I have described in the section above. Then students were introduced to Kelly's (1955) construct theory which was the basis for the subsequent exercise. Having introduced the theory, I then asked students to familiarise themselves with constructing a personal grid by doing a preliminary exercise using 'friends' as the concept to be explored.

Students worked in pairs for the exercise. They were then asked to construct a grid as follows. The elements of the grid were the subjects that they studied on first year Design and Media Management. Three subjects from this set of elements would then be chosen, one of which was Human Resource Management each time. They then asked each other to think of one way in which two of the subjects were similar and yet different from the other subject. The student would then record the other students response under emergent pole as well as putting an 'X' along the row corresponding to the three subjects that s/he had chosen. This done the subject would then note the implicit pole, that is the complementary of the emergent pole. For example the complementary of teacher is pupil in an educational setting, of honest is dishonest if the concept being explored was friendship. Both students would therefore act as interpreter as well as subject, thereby constructing a *repertory grid* for each student.

### 7.2.1.3 Triangulation<sup>40</sup> of Feedback from Students, Myself and Ella.

The data consists of written comments from Ella (she was the participant observer during the first three sessions and lectured law students at Thames Valley University), a diary account of the days Session completed by myself following completion for the Session and student ratings of the Session at the end. This pattern of analysis by contrasting the reactions of students, Ella and myself continued for Sessions 2, 3 and 4. From this it was hoped to gain a more complete picture of how the students experienced learning during the Sessions, on an individual and collective basis.

*Ella* said that she felt a little confused by the introductory lecture (to the Kelly grid) and in waiting for instructions for conducting the Kelly grid. Doing the exercise she felt had been positive in that she had become aware of implicit assumptions that influenced her learning.

There were gains for some students, who found the Session and exercise reasonably helpful

---

<sup>40</sup> See chapter 4 for a discussion of triangulation.

and interesting. More specifically students<sup>41</sup> had become more aware of the subject modules that they were studying on Design and Media Management year 1 and their interrelationships, and that the exercise had provided the opportunity to carry this out. Some students had become aware of their own opinion (or perceptions) regarding course subjects and potentially some could see how this could be used to change or improve things on the course. One student felt she could be more expressive of her thoughts having had to communicate them to her partner during the exercise. Two students said that they felt that the environment was relaxed in the classroom.

Being unable to relate the *Process of Learning* to the Design and Media Management course led to diminished interest and reduced concentration for some students. For some students, there was the feeling that they had learnt nothing substantial in Session 1, or that they were unsure of what they had learnt by the end of the Session.

*Diary* - In the *diary* that I kept<sup>42</sup> after Session 1, I write that facilitating the Session was difficult initially for me chiefly because it was my first teaching Session with them, that I found doing the grid was difficult despite the preparation that I had done beforehand. Also students were coming in and out of class for the first half hour so it was a bit unsettled. I felt during class that constructing the grid with the students was exploratory for me as well as them. I was aware that some students were having difficulty with the exercise. I felt that the Session might have gone better had I structured the time to allow for a proper break and further discussion.

## 7.2.2 Session 2: 26.4.93, Attendance 20

### 7.2.2.1 Aims of Session

Session 2 incorporated reflection and discussion elements. The aim was to begin with a summarising of the work done in the previous week, entitled 'reflections', followed by comments from the students if they wished to raise any observations that they had. Then the students engaged in four selected sub-sessions as illustrated in Figure 3 below:

---

<sup>41</sup> 'Students' refers to three to five students unless otherwise indicated.

<sup>42</sup> The *diary* was written by myself after the class but before consulting either the student ratings or Ella's opinions on the Session.



### **Figure 3 - Details of Session 2 as Presented to Students**

#### **Session 2, Monday 26th April**

**Reflections:** Here a summary of the previous Session and its implications and an opportunity for you to discuss any observations of the previous Session and its application to your learning.

**Sub-session 1: Information: passive/active, primary/secondary (micro and macro issues):** Here we engage in an exercise that explores the quality of information coming to you and the implications of that quality for your learning and understanding. Also what is the difference for understanding do you feel, between your involvement in constructing understanding over passive understanding?

**Sub-session 2: Information: information flood/expertise:** With so much information available to us, what are the criteria by which it should be judged? How should it be evaluated? Is quantity necessarily the way to understanding? What do experts do? Who are they?!

**Sub-session 3: Information: handling of information, how best to do it?** What do you feel is the direction that ought to be taken in learning on Design and Media Management, with respect to information?

**Sub-session 4: Understanding: assessment:** What experiences of assessment have you had on the course? What do you feel has worked best for you? What benefits can be derived from the different forms of assessment? What shortcomings are there?

**Ground rules, and a simple exercise to do with your Personal Grid for the next Session.**

Engaging the students required them to reflect upon the sub-session topics by drawing from their experience initially, then sharing and contrasting their ideas with a partner before then sharing their opinions and observations with the rest of the class. From this students could become aware of a broader range of opinions on the issues to be discussed. Students were also provided with some literary references dealing with the issues being discussed which they could consult in order to clarify and balance their own thoughts on the issues. Because of the time limit, it was necessary to put a time structure on each of the sub-sessions in order to be able to complete the overall content aims. The group discussion framework was influenced by the work of Northedge (1975). Upon completion of the sub-sessions it was intended to improve the relationship between myself and the students and amongst themselves by agreeing on rules for deciding what our respective responsibilities were. Finally students were to be asked to select constructs from their grid that could be explored in Session 4.

The sub-sessions dealt with learning activities and epistemic issues as outlined in the

previous section. In the first 3 sub-sessions students' attention was drawn towards information or epistemic issues, while the final sub-session drew students attention towards a learning activity namely exploring the nature of assessment and how it affects their learning.

The aim of sub-session 1 was for students to think about how they 'interact' with knowledge, namely how to appraise information and how this appraisal might influence the quality of their learning or understanding. It was also intended here to heighten their awareness of how knowledge or ideas is influenced by their presentation. The second sub-session intended to inform students through their own exploration, of how information was being made accessible in ever greater quantities and what might be the problems with coping with increasing knowledge. Students would also address the issue of expertise, by exploring the qualities that qualify one to be an expert.

The third sub-session would lead on from number 2, with students being asked to 'resolve' the issue of handling information and knowledge. In the final sub-session students would look at a learning activity, namely assessment. Students would be asked to explore their experiences of assessment on first year Design and Media Management and begin to decide what constituted both good and bad assessment, in terms of quality of learning that ensued.

#### **7.2.2.2      What I Did as Teacher, What the Students Did, the Pedagogic Rationale**

I began by explaining to students the purpose of the *Process of Learning*. I felt that this was necessary because of the anxieties or misunderstanding that some students seemed to have about the course after taking part in Session 1. I then provided them with the Course Outline and I explained it to them. Then in 'reflections' I summarised with them what had been achieved the previous week with the Kelly construct grid. Students were provided with a handout here, where I had summarised the constructs of the various students, emphasising that some constructs had occurred quite frequently, suggesting that they might be a priority. For example, many students spoke about the necessity of students taking the initiative in learning tasks on Design and Media Management, if they are to get the most out of the course. I then directed students attention towards the 4 sub-sessions as described above. Students engaged in these topics through exploratory discussion. Co-ordinating the Session within the time allowed (3 hours) required discipline and control. Students remained in the same pairs for discussion before and after the break.

#### **7.2.2.3      Triangulation of Feedback from Students, Myself and Ella.**



*Ella* provided feedback after having participated in Session 2. She thought that the theory underlying the learning activities needed to be presented to students so that their experiences (and hers) could be balanced against them in order to check the validity of their feelings. She felt that students were perhaps a little bewildered, that they did not relate what they had learnt to the project they were engaged in on the Design and Media Management (Design and Media Management) degree. She felt that they may not have seen the point of the second Session. While she stated that the atmosphere of the classroom and the relation between students was fine, she thought that it might have been more teacher centred than I had intended. She pointed out that some students did contribute during the Session but that they were rather unsure of themselves. There were some elements of passivity in the classroom. She felt that there was considerable variability amongst the students in terms of interest and motivation.

In considering why students reacted to the Session in the way that they did, she felt it was important to be aware that students will have 'very deeply embedded prejudices' that cannot be hurried along or challenged by reflection in one Session. *Ella* felt that what we did in the sessions was too hurried for 'real thought'. She saw it more as an introduction to critical thinking. Students will have ideas about 'learning as a process of acquiring knowledge banks, and experts as being infallible' and therefore she suggested that such 'prejudices' must be given time before they can be 'overcome'. They are 'the starting points of negotiations, where students gradually abandon their prejudices as a result of the good experience they get with the alternative points of view.' Finally she thought that the Session could be improved, suggesting that one needs to be in tune with their feelings before they have consolidated them in their minds.

There were mixed reactions amongst the students in terms of how they experienced Session 2, in terms of their feelings and thoughts. The most important concern expressed by students was that they were unsure where the course was leading (and that they were unsure why for example topics such as expertise were being chosen for this course). If they could be clearer about why they were doing this course then they would be more enthusiastic about their involvement in it. Instead some students felt that the class were not interested in the course, and that as one student put it he was groping in the dark.

Four students suggested that it was unnecessary to have to pool together ideas by writing them on a flip chart. Three students felt that they could not see how this might be applied to Human Resource Management or other aspects of their lives. One student focused on assessment and said that s/he could now understand what the essay was to be about. Feeling like a part of an experiment was the comment made by one student who stated that: 'most of session reflection is common sense and self explanatory and pointless to discuss'.



Proposals were made by some students to remedy the problems that they perceived. They felt that the class could be improved if discussion was focused on a more deep level amongst the students, with less sub-sessions, possibly more debating and greater clarity about where the course was going.

Several students felt that they had made positive gains from Session 2, including some of the students from the above commentary. For some the course was simply interesting. Others were more specific saying that they felt they could express themselves freely during the class. More importantly, many students believed that they had learnt to be more objective about their own learning. They felt that they had learnt more about how the degree works and the processes that go on in one's own mind in this respect. One student stated that he would be more able to pinpoint 'problems needing solving'.

A third of students believed that their understanding of Session 1 had improved following reflection. Upon completion of Session 2 (namely sub-sessions 1-4) they believed that they better understood:

- expertise
- the qualities that go into good teaching
- how to appraise a piece of set work
- the subjects on Design and Media Management year one
- how to go about seeking information (researching) for a consultation

One student said that the exercises had helped her to become 'aware of how one learns in life and to think about how one can improve different works'. Another student proposes becoming more aware of how the learning activities might be applied to 'the outside world'. Finally some students said that the teaching had improved on the previous week, and that the Session was more interesting and pleasant<sup>43</sup>.

In the *Diary* I maintained a checklist of class activities and how I felt the students were involved. I felt that the atmosphere of the class was leaning more towards being open, student centred and informal. At the same time I felt it was conventional in terms of students being passive while I directed it so as to facilitate group discussion through a variation on the Northedge (1975) structured group discussion technique. There was quite a degree of variability in students backgrounds in terms of gender, nationality, confidence, attention rate and concentration. Some students were actively involved in the class with a few consistently active in the learning tasks.

---

<sup>43</sup> The use of the word students here is flexible, it may refer to one student or more (in which case it will be emphasised). The point to be made is that the statements of students are treated as valid whether made consensually or individually.



Preparation was demanding for this Session in terms of having to summarise the previous weeks proceeds from students (Kelly grid), as well as having to prepare work for the four sub-sessions in Session 2. I became very aware of the skill required in teaching such a course for a number of reasons. Firstly I became aware that some students had not been satisfied with the previous weeks class. I was aware in class of the work and effort required to get students involved enthusiastically in the activities and found that perhaps this was one of the greatest challenges.

Skill and confidence are required in facilitating effective group discussion. It required that I was comfortable with the sub-session issues and in dealing with students that were either passive (perhaps expecting didactic teaching) and the need to get them more involved (as the subsequent class discussion depended upon student not facilitator contributions), or disinterested because they were not yet clear on the purpose of the *Process of Learning* to their studies. There were other factors such as students staying in pairs after the break having made the decision not to involve themselves sufficiently in the activities. One also needs to become skilled in summarising the contributions of various students and/or drawing conclusions and comparing the students views with theorists views. Preparation and confidence in the teaching of such a course are crucial to its success.

### 7.2.3 Session 3: 10.5.93, Attendance 19

#### 7.2.3.1 Aims of Session

Session 3 was structured to begin by once again reflecting on the previous Sessions' contributions. This reflection would consist of a summary by me of the students' contributions during Session 2 which I summarised by collecting the written work of students completed in Session 2 as well as summarising work done on flip charts, where I invited students to share their ideas with the rest of the class. On completion of this summary the students then had the opportunity to contribute any observations that they themselves had made.

Following 'reflections' the students explored 4 sub-sessions dealing with epistemology and learning activities. Sub-session 5<sup>44</sup> would engage students in beginning to explore how ideas and theories come to formed. They would relate this question to their first year studies by looking at subjects such as economics, statistics, psychology which they studied in first year. Students would be asked why there can be different theories trying to explain

---

<sup>44</sup> Continuing on from Session 2

the same 'reality', for example the prevalence of theories attempting to explain/describe personality in psychology. From this perspective they could then begin to appreciate the qualities that make for strong as opposed to weak theory. In sub-session 6 students would look at a learning activity namely group learning compared to individual learning and attempt to draw out the strengths and weaknesses of both by focusing upon their experiences in first year Design and Media Management of both types of activity.

By grounding their experiences in their first year Design and Media Management studies, students would explore the nature of information from the perspective of objectivity/subjectivity in sub-session 7. In sub-session 8 students would explore how writers in subject areas that they study in first year put their point of view across. More specifically students were to look at the issue of argumentation and begin to discover the qualities in 'good' argumentation. Students would receive a handout in class dealing with argumentation after personal and shared exploration, and use it to appraise the merits and demerits of an argument with which they were familiar in first year study.

Upon completion of sub-session 8, the students attention would be drawn towards Session 4. Students would choose any issues or themes that they wished to explore and discuss. For example they could choose themes that they had discovered from doing the Kelly grid in Session 1. There was flexibility in any case in choosing subject matter for Session 4. Finally students would be given details about the assignment and references that they might find useful in researching it.



## **Figure 4 - Details of Session 3 as Presented to Students**

### **Session 3, Monday 10th May**

**Reflections.**

**Sub-session 5: Information/knowledge: paradigms, theories-information: What happens to information, how do you work with it on Design and Media Management? What are the methods that they (economists, psychologists..) employ to represent reality? How might you apply them to reality?**

**Sub-session 6: Learning activities: thinking about group and individual learning experiences in the context of other viewpoints, plurality of views: What can we learn from the experiences of discussing ideas with others, and experiencing other peoples viewpoints? Does it improve understanding of 'issues'?**

**Sub-session 7: Information/emotions: Objectivity/Subjectivity: How important are emotions to understanding? For instance issues on the course, what are the different ways in which we may look at issues in management studies/design, and what are their relative merits?**

**Sub-session 8: Information: evaluation of arguments in management studies: What types of problems or challenges do psychologists/management theorists/economists... attempt to understand and act on?**

**Proposals for final Session number 4, based on Personal Grid**

**Details of assignment and references (hand in date 17th June).**

#### **7.2.3.2 What I Did as Teacher, What the Students Did, the Pedagogic Rationale**

I prepared a large amount of material for this Session. I prepared handouts before the formal start at 10.00 am, put up a flip chart, arranged the desks in a horseshoe shape in order to try and achieve more informality. I recapped on what we had done in previous Session and outlined Session 3. Students were provided with handouts. I talked about information, knowledge paradigms and theories, group and individual learning. After a break, I provided the students with handouts on information, evaluation of arguments and management studies. This was finally followed by Kelly grid rating, then students chose between either listening to a tape or the argumentation session.

In reflections I summarised the work done in Session 2, dealing with expertise, primary and secondary sources of knowledge, assessment and how to handle information in a project. I then went on to the 10.30 session exploring how theories are formed.

Students seemed quiet and inactive in carrying out sub-session 5. Some students seemed unclear about the task, grouping up and starting to form their own impression of what it ought to be. Some students thought that the whole exercise was difficult and could not relate it to the Design and Media Management course. I used flip chart to show what groups had decided and the contributions looked very paltry up on flip chart. It was most difficult, as I really felt up against the attitudes and resistances that students have to trying out things. I feel I might have improved the situation by clarifying the purposes of the tasks yet again. It is essential to be clear about the aims and directions of the class as well as the overall direction with such a course. I had difficulty pitching this course at the right level. I made the assumption that students would contribute ideas in sub-session 5, regarding information about models in economics. However students did not want to make contributions for various reasons- lack of clarity, shyness or perhaps disinterest. A big problem was that the students offered no feedback, they were too quiet.

In sub-session 6, I got them to think about group and individual learning activities. A handout was made available at the end on assessment. I asked them to list the advantages/disadvantages of both types of activities. After the break the class (less 5) returned and were given a handout. Then I directed them towards emotions/subjectivity/objectivity. Sub-session 8 looked at argumentation. Students were given a handout. I asked them to each read a page using teachback/listen from Session 2<sup>45</sup>. Students had several difficulties with this. For example, they did not know how long it was going to take, the sub-session was rushed and students complained about that, saying that they were not getting enough time on these tasks. Some listened to the tape, others to the Session. Then I got them to rate the class. No one made suggestions for using the Kelly grid constructs in Session 4. This implied that I would have to choose constructs therefore for the final Session of the *Process of Learning*. They then listened to the tape (on learning to learn) and the class concluded.

### 7.2.3.3 Triangulation of Feedback from Students, Myself and Ella.

Ella provided commentary on Session 3 in her role as participant observer. She described the Session as being 'positive'. The handouts were good and she felt that the Session had achieved for the students an understanding of the 'terms paradigm and differentiation as used by psychologists at least'. She felt that the handouts (and the exercises upon which they were based) intended to encourage a deep approach 'recognising a surface approach can be induced (a) by a seemingly overwhelming amount of information and (b) the

---

<sup>45</sup> Session refers to the whole session on a particular day, while sub-session refers to the elements contained within each Session



deskilling effect of belief that an expert knows everything'. She pointed to my presentation where I was presenting complex ideas to the students using unfamiliar language 'at a high speed at which it could not be absorbed, enjoyed and relished by those listening to the full'.

Some individual students felt that they had found the argument analysis productive, that they had learnt about group learning contrasted with individual learning, and learnt how to be more critical in examining the validity of a criticism or textbook. It was also felt by some that the agenda helped, that it was an interesting Session and that it was even clearer than the previous Session.

It seemed however that the half of student comments expressed difficulty or anxiety with Session 3. Many of the students' comments expressed feeling confused about the purpose of the exercises. They felt that more clarification was needed here in explaining their purpose and relation to the assignment. It was felt by students individually that the topics were not related, that it was ambiguous what the gains to be made from the course might be. It also needed to be made more straightforward one student felt. One student pointed out that it may become clearer for him/her when s/he read the background information and literature. It was also felt by another student that the content of Session 3 was common sense.

A few students suggested improvements to the teaching by not rushing the sub-sessions so much as this was frustrating and dissatisfying. It could also be improved by organising so that the agenda was adhered to and the tasks were not interrupted. Clearer examples would also aid understanding. A couple of students focused on the assignment and expressed anxiety in that they could not link the sub-sessions with the assignment.

In my *Diary* I recorded Session 3 as difficult to teach. During 'reflections' I felt that I was getting little feedback or interest from the students, either because they were tired from the weekend, passive or shy. The first sub-session dealt with theories and paradigms. The intention here was for students to become more aware of how theories and ideas come about and what qualities might make for a good theory. I felt that several students were disinterested or resistant to trying out things like this. I began to have difficulty facilitating this Session because it was dependent upon feedback from students about the subjects that they study and yet students seemed so quite and almost totally inactive, and passive.

A flip chart was used to show what groups had decided in this exercise and yet the feedback was minimal. I had difficulty in subsequent sub-sessions of Session 3. A difficulty, I felt, was in pitching it at the right level for the Design and Media Management students, as it felt easier facilitating it with psychology students where my background is in undergraduate study. Here I had assumed that students would make contributions about



models in economics for example but this did not occur either because students were shy or disinterested.

Perhaps there are more deep seated reasons why students were having difficulty with the issues explored on the *Process of Learning*. For example, several students wanted to grasp the facts of their course in first year rather than challenge the theories prevalent in their modules. It was pointed out in class that there is a difficulty in engaging in this type of course when all you have in year 1 are students trying to get to grips with the facts of the subject areas. This could be a difficulty faced with this type of material. Because the Session seemed to be difficult for students, I felt it was necessary to explain the nature of the course. Several students were resistant to the nature of the material being discussed on the *Process of Learning* such as in sub-session 5. This can lead to difficulties for a student centred class where the teacher depends upon interaction and student contributions, but where the some students remain unwilling to engage.

Ella proposed that the students were shy and quiet, but that student relations were good in the groups or cliques as it were. I did not have harmony because I was breaking up the students so much. The intention was to create an open relaxed environment by forming a horseshoe shape with chairs yet it seemed that the atmosphere was closed more than open and teacher centred rather than student centred. One thing I learnt from this Session today is that students can develop very firm attitudes and perceptions of the world even at a very early age. With a course like the *Process of Learning* I am attempting to engage the students in critical reflection of - ideas, knowledge, concepts and learning activities that they come across in the first year course. However there is a whole host of resistances and barriers and attitudes that go against that engagement and I felt that that came through considerably in Session 3.

This would not complete the explanation however. I feel that there were factors in the environment within and outside the college, amongst peers and perhaps their orientation towards study and what they want to achieve afterwards which led to some students being passive in the class. A range of factors led me to believe that the students here in management studies are looking more for answers and structure in their studies. Maybe students need more facts and structure, yet I am trying to get students to question those facts. Perhaps they have not had enough time at that and therefore need more time to understand the course before evaluating that very knowledge itself and learning activities.

#### 7.2.4 Session 4: 17.5.93, Attendance 15



#### 7.2.4.1 Aims of Session

In Session 4, students would first have the opportunity to reflect and recap on the contributions that they had made in the previous week's Session. Following this they could then discuss any issues that they felt might be worthy of exploration. They could take such topics from the work that they did with the Kelly grid. Following this discussion the facilitator would draw conclusions with the class about the implications of what they had just discussed. Finally students would then have the opportunity to have any queries concerning the *Process of Learning* addressed.

## **Figure 5 - Details of Session 4 as Presented to Students**

**Session 4, Monday 17th May**

**Reflections.**

**Concepts nominated by class from Personal Grid for discussion**

**Conclusions**

**Any queries**

**(I am available for discussion, or to arrange an appointment if there are any queries that you may have about the course.)**

### **7.2.4.2      What I did as Teacher, what the Students did, the Pedagogic Rationale**

I began Session 4 by reflecting upon the findings and contributions from students in Session 3. This was a bit didactic and brief with little comment from students. I then rearranged the agenda of the Session for Scott's<sup>46</sup> arrival. Following the discussion with Scott I gave details of the assignment to students as well as an explanation of it. I asked students to select a question and decide with an individual why they had chosen that question. Then I did an assignment task. including flip chart work with some student involvement. I then chaired a discussion with Scott.

### **7.2.4.2      Triangulation of Feedback from Students, Myself and Ella.**

Students felt that the lecture was helpful most notably because they had the opportunity to meet and listen to Scott's views on the course as a graduate of Design and Media Management. Two students felt clearer now on what to expect in the second and third years of study. One student 'gained some insight into how a graduate from this degree chose his work' while another was encouraged 'to see he has found success following the course'. The benefits of the course were now clearer for one student. One student was

---

<sup>46</sup> Scott had graduated from Design and Media Management the previous year. I invited him to attend the final Session so that students could chat with him about what he felt he had learnt from Design and Media Management in relation to his career work. The aim was to make students aware of skills that they were acquiring on Design and Media Management and seeing how they were being applied in the workplace.



aware of 'important elements of this course like assessment styles and group/individual' issues the benefits of which would be seen later on. One student would be more considerate of their options now for second year, having become more aware of their attitude towards the course.

Several students offered criticisms of Session 4. Students generally found the audio tape (20 minute tape on learning to learn) 'heavy going', and they did not feel that they had learnt much from it. One student now had 'an insight into how much and little the course and learning process helps in the real world'. While another summed up by stating she had 'no clear idea on what is expected in terms of what the finished work should look like...'.

In my *Diary* I found facilitating of Session 4 hard with three students seeming passive and disinterested in the session.

### **7.3 *Triangulation of Findings and Discussion of Implications***

#### **7.3.1 Recap of Issues Central to this Research**

I present the question central to this thesis below<sup>47</sup>:

- Can general critical thinking skills courses such as the *Process of Learning* be taught to students side by side with their first year of studies at universities in the United Kingdom?

If they can be taught meaningfully, then what benefits occur in terms of the quality of the students' learning outcomes? Or, alternatively, are such courses too general and therefore meaningless or abstract for students as McPeck (1990) argues? Is teaching the critical understanding of information of a particular subject discipline the route that ought to be followed instead in studying the processes of reasoning?

These questions highlight the issues of debate between those supporting the implementation of critical thinking into the curriculum and those who argue against it. I will respond to these issues based upon the reactions of students, myself and Ella, who acted as a participant observer involved with the *Process of Learning*. The conclusions drawn are based upon triangulation of the findings across all four Sessions.

Further evaluation was conducted through analysis of the interviews with students

---

<sup>47</sup> From Section 2.9

afterwards, as well as students having to complete the assignment as part of their course requirements. These findings are presented in chapters 8 and 9 of this thesis. Therefore it is important to see the feedback from this chapter as one important element that contributes to the overall picture. The conclusions from this chapter are assessed and refined in light of the findings in chapters 8 and 9.

### 7.3.2 Increased Awareness of Learning for Students on Process of Learning

The most significant and frequent positive response from students was that their awareness of learning had improved. Many students had become more aware of the implicit assumptions that they had made about learning. Becoming more aware of the subject modules and how they work was attributed to the *Process of Learning* by some students. If such awareness was developed one could see how it could lead to students becoming more aware of effective teaching practices such as in the area of assessment. Student involvement in providing feedback to staff could lead to improvement in the design of the curriculum. Greater awareness of how s/he learns could enable the student to more effectively apply their learning activities in other situations. One student felt he had become more objective regarding his learning. This was achieved by measuring his feelings about learning against theory (which was provided in handout format) and thereby checking the validity of his feelings. Some students found the sessions simply interesting!

### 7.3.3 Student Concerns with Purpose of the Course

Students expressed concern or anxiety with aspects of the course. Their responses address to a degree the questions raised above in this section while also highlighting the responsibilities of the teacher in engaging his/her students in reflection. Several students quite frequently described feeling confused about the purpose of the *Process of Learning*. One third of students felt that its relation to the course Human Resource Management (and ultimately Design and Media Management) needed to be clearly articulated. In examining the triangulated responses, these concerns are reflected in student and teacher attitudes and responsibilities respectively.

Students may find such a course difficult because of their orientation to study - they had come to Design and Media Management to develop their skills in photography for example yet find themselves embarking on the *Process of Learning*, a course that encourages them to question how they are learning in such situations. They may feel that such a course has nothing to do with their interests or with a possible career path, or as one student pointed out it was all common sense anyhow.



One student argued that what students need in first year are the facts and information of the discipline rather than reflection on the reasoning processes involved. This may support the claim by McPeck (1990) that one cannot have a course that offers a syntax but no semantics, especially important for first year students. In chapter 10, I resolve this point through analysis of chapters 8 and 9.

It was felt by Ella and some students, that the course was rushed and that they were dealing with complex ideas that required more time to understand. Ella suggested that students often have deep seated prejudices or ideas that need time to resolve. Students adopting a surface approach to learning this course (Marton and Saljo, 1976) would find it more difficult as it involves reflection on the part of the student. A surface approach was evidenced by students often referring to the assessment at the end of the course. Their comments suggest that some students had prioritised the assessment rather than the course content itself. Such an emphasis might explain student anxieties about the purpose of the course and induce a surface approach to their learning so that (most importantly for them) they completed the assessment requirements of the module.

#### 7.3.4 Critical Thinking - Syntax or Semantic?

This course was taught identically<sup>48</sup> to both Design and Media Management and psychology students. The subsessions taught on both degree courses were exactly the same. At face value therefore, it satisfies the argument (in chapter 2) that a course encompassing critical thinking skills can be taught in general across subject domains. The findings of this chapter respond to this debate as follows.

Ella pointed out that the Sessions may have been more teacher centred than I intended. If so than this could have led to students being passive and less involved in the exploratory Sessions. It is clear however, that teaching critical reflection requires skill and confidence in encouraging students to become involved and to explore their experiences of learning in light of theory. This can only improve with more experience of conducting such courses and with feedback from the students used to improve subsequent courses.

Provide some easy points so that they can get into the dialogue from a quite sensible point of view. You are not giving much away by giving out a few basic points and this can then develop in the discussion, in the games, and in the arguments. That is my preferred way of doing it. I think in your course you were giving people an experience, you were then bringing the theory, but I think it could have been integrated a little bit more so that the theory was brought in immediately and in

---

<sup>48</sup> As The Process of Learning and *Personal Development* respectively.

relation to the experience. It is a very good idea and a very good course. (Ella interview, Appendix XIV)

An important point here which refers to teaching a general course on critical thinking being merely a syntax without a semantic concerns the teacher's knowledge (McPeck, 1990). In conducting this course with students both on Psychology and on Management degree courses I felt more comfortable with the Psychology students. I have greater background knowledge of the discipline and was therefore able to furnish students with examples relevant to the sub-sessions. It would seem therefore, that in teaching a general course on critical thinking it is necessary for the teacher to have knowledge of the discipline. This is especially important for students in their first year of studies at college who may not have very much factual information of the discipline. The *Process of Learning* and *Personal Development* both had general elements in that the courses were equivalent in epistemic structure, yet both courses relied upon subject specific concepts as exemplars for class activities. For example, the *Process of Learning* was grounded in activities, ideas and discipline concepts being studied in the first year of Design and Media Management.

Evidence from this chapter suggests that if critical thinking and reflection is to develop for the student, then it needs to be incorporated across their degree. In their first year it should be seen as a starting point that appreciates the diversity of student motivations, abilities and approaches to learning. It is therefore essential to pitch the course at the right level so that it is accessible to first year students. For example we saw how it might be difficult for students to criticise 'Argumentation' or 'Expertise' with little knowledge of the discipline. In reflecting upon reasoning processes one must make it accessible to students in terms of their experiences. If the ideas are too complex then the student may not relate it to his/her experiences on the course so far. It is important to involve the student in exploratory activities and clearly state the reasons why they are engaging in critical reflection as there will be a great demand to describe how it relates to the degree itself. Such a link cannot be over emphasised.

### 7.3.5 Conclusions

In this chapter and overall in the thesis, I describe and evaluate the findings from the *Process of Learning*. There are important benefits to encouraging students in reflecting upon how they learn, and in how they are taught in first year. Such benefits would arguably develop with experience and practice by the student. Even in first year students can begin to become more aware of how they experience learning, how they experience a variety of teaching approaches and how they are assessed. Such awareness balanced against the opinions of fellow students and theory can begin to develop a more critical



appraisal and approach to their learning activities. It can also provide feedback to staff on how students are learning and feeling about the course which in turn can lead to improvement in the curriculum.

I think that it is good that we should try new things, and make people aware of learning processes. I'm not sure if it stops at learning processes. We need to get away from understanding of learning as pure knowledge transmission. One has to focus students attention on the skills involved in acquiring and handling that knowledge and the possibility of developing those skills, of refining them and making them better. The longer you allow them to think that it is just a matter of accumulating information, the longer you hold back a whole range of students that might be very talented. So the sooner you start the better. Our problem is that we start at a middle level of abstraction that ignores the people below, but we could get to these people if we talk to them more and if we have more two way processes and more feedback. And they would help with the difficulties, I mean once we know what the difficulties are we could help them but we set things up so that we can't hear them. (Ella<sup>49</sup> interview, Appendix XIV).

Chapters 8 and 9 refine and clarify the (triangulated) findings emerging from this chapter, in addressing the aims of this thesis. The following summary lists the findings from this chapter on teaching critical thinking to first year students:

- Students begin to develop awareness of the subjects they study and their interrelationships.
- The potential is demonstrated for students to become more aware of the thinking skills that they use on Design and Media Management
- Some students are initially resistant to studying the *Process of Learning* because they can not relate it to the course aims or because they do not wish to question how they learn. They are only interested in mastering the facts of each subject discipline.
- It is important to pitch the course at the right level for first year students who are only beginning to acquire information and facts about the subjects they are studying. It was noted that the *Process of Learning*, while an introductory course deals with complex ideas which present new challenges for the students. They are being asked to reflect upon the thinking skills that they use on their course while at the same time they are coming to terms with new subjects, concepts and facts from each discipline on the course. This is likely to present problems for a student with a surface approach to learning, a less progressed conception of learning or whose orientation towards college is vocational, namely s/he seeks only the qualification.

---

<sup>49</sup> Participant Observer during *Process of Learning* sessions

- Several students acknowledged that they had begun to become more objective about 'how their degree works'. The *Process of Learning* required students to examine how knowledge structures such as concept formation or expertise permeated the subjects on Design and Media Management. The Sessions encouraged students to begin comparing the strengths of competing theories or models within subject areas.
- It is important for the teacher in instructing a course on critical thinking to first year students, to have knowledge him/herself of the subjects being studied. It is important to be able to use examples to make the subsessions clearer.

The findings in this chapter indicate that teaching a generalised critical thinking skills course in first year is possible as debated in chapter 3. However meaningful learning from such courses for the students requires that the course be modified or refined to fit in with the knowledge content of the course studied.

Teaching 'thinking about thinking' to first year students in the abstract sense is less likely to be successful for several reasons. Firstly, the students are only commencing to master subject facts and so could not meaningfully relate such a course to their learning tasks. It must therefore be pitched at the right level. Secondly, the students must see understand the relevance of critical thinking course to their studies. For example, a first year student in psychology being taught examples from physics (or any subject) on how ideas are constructed, is unlikely to see the purpose or relevance of such a course to their degree course. Thirdly, the teacher must have knowledge of the subject areas being studied due to the complex ideas that are presented in a critical thinking skills course. For example, a student may need examples from the teacher in order to prompt his/her awareness and exploration of how they use thinking skills.

The findings suggest that one can teach critical thinking in the general sense as advocates such as Paul and Norris suggest. However to make it purposeful and relevant to students in their first year, it must as McPeck suggests be given a 'semantic' by being integrated within the subjects that they study as suggested in the preceding paragraph. These initial findings and conclusions are elaborated upon and refined in the remaining chapters.



## **8. 1993 Interviews with Students Having Studied the *Process of Learning***

### **8.1 Introduction**

In evaluating the effects of the *Process of Learning* on students' learning, eight students were chosen at random and interviewed to discover their reactions to the course. The students achieved grades on the *Process of Learning* assignment ranging from pass to first class. Transcripts were made of each of the eight semi-structured interviews and a description of each interview is provided in this chapter accompanied by quotes. Each interview is then analysed according to the rationale presented in Chapter 5.

Each interview follows the (semi-structured) interview sequence of questions below:

- Firstly the students' perceptions of the Design and Media Management degree are presented.
- Secondly, student learning on Design and Media Management and the *Process of Learning* is appraised in terms of the conceptual framework provided in Chapter 3 as appropriate.
- Thirdly the interviewees reactions to taking part on the *Process of Learning* are evaluated.

Conclusions are then drawn based upon the evidence from these three strands, on the benefits and difficulties of teaching critical thinking to first year students.

The interviews are dated when they took place. They were mainly conducted during or after the time that the students were conducting the *Process of Learning*<sup>30</sup> assignment. All interviews were face to face unless stated otherwise. Each is completed with an analysis. Students agreed to be interviewed on the basis of confidentiality<sup>31</sup>. Therefore I refer to each of them individually using two capital letters.

---

<sup>30</sup> Process of Learning is Process of Learning, Design and Media Management is Design and Media Management degree course, HRM is Human Resource Management the module of which Process of Learning was a part.

<sup>31</sup> This was also requested by staff.

## **8.2 Interviews with Students having Studied the Process of Learning**

Five interviewees were chosen to be representative of the class in terms of marks on the assignment for the *Process of Learning*. The remaining three interviewees were chosen according to age, gender, nationality and ethnicity. Agreement was made with students and staff that interviewee names would be confidential.

### **8.2.1 Interview with AA, 23/6/93, Self- Report<sup>52</sup>**

AA heard about the Design and Media Management degree through the college prospectus and chose to study as it covered most of her interests and was close to where she lived. She describes Design and Media Management as a course covering the essentials of many subjects where she can discover more about her own interests as well as her strengths and weaknesses. She welcomes the diversity of subjects offered on the course as it stimulates thinking in different areas, adding that having such diversity has made it difficult for her make a later job choice. She describes assessment on the course as very satisfying while expecting there to be more teaching.

As a learner she states 'I am working hard to fulfil all the requirements and enjoy getting good results. When I am working on something I get fully committed and spend lots of my time on it.' This is motivated by her perception of learning as enriching yourself, as 'getting more knowledge and power which I think is security for later on.'

The *Process of Learning* has helped her to realise 'the importance of the ways one learns, and what factors are important'. She does not feel that her views about learning have changed having studied it. In doing the *Process of Learning* assignment, she read all the handouts and references, then chose the most important elements from this. On reflection she felt that this was not enough for critical thought, so she interviewed students in second year discussing the process of learning and Design and Media Management degree with them. Their opinions as well as the theoretical writings were then used in the report. She found the course handouts very helpful, interesting and enjoyable to read.

She thinks that the *Process of Learning* 'is a good opportunity to actually go through a process, and one can see in more details what has to be done to make learning better.' Having reflected upon actions in the past, it was a new experience for her to reflect upon her own learning in this way.

---

<sup>52</sup> The interview was conducted by AA by tape recording her answers privately as she could not attend a face to face interview.



I think it depends on the character of the person and the circumstances. For me personally it wasn't difficult as I think it is necessary to reflect upon everything one does.

Improvement can come from reflection in finding ones weaknesses and difficulties and changing them. If there are barriers to reflecting on Design and Media Management then she feels that there is a problem with the 'interpersonal relationships' between fellow students and staff. When difficulties arise it is difficult to talk in specifics one has to generalise, 'for example talking about specific lecturers or students is difficult.'

I asked her what she felt the main outcomes were of having engaged the *Process of Learning*:

At the end of my report I made some suggestions of how to improve the Design and Media Management course. This was possible because of the *Process of Learning*. The main outcome for me was to recognise the importance of different factors which can affect the learning process and outcome.

When asked about the conceptions of learning the fifth was most important for her. Teaching on *Process of Learning*<sup>99</sup> was in between high and low for her because of the variety of teaching methods used, opportunities for discussions and small group activities, and the use of examples which helped make the concepts more understandable. Improvements could be made to Design and Media Management she felt, by increasing contact between staff and students, having more teaching classes and discussions on the different topics which are covered on the course.

### 8.2.2 Analysis of AA Interview

AA describes learning for her as involving self enrichment and empowerment (the acquisition of knowledge and power for use in later life). Thus it would seem that her motivation for learning stems from intrinsic and extrinsic sources respectively, further reflected in her reference to getting good grades. Her emphasis seems is on self motivation and initiative recognising that good grades are reflected through hard work.

She describes the *Process of Learning* as highlighting the importance of the ways that one learns, recognising that one can improve this through self initiative or through recognition of the different factors that can affect the learning process. She felt that the *Process of Learning* led to improvement in her learning. She has reflected on her everyday life

---

<sup>99</sup> Process of Learning is the abbreviated form of the *Process of Learning* educational programme.

experiences, yet reflection upon learning is new to her. From the interview it appears that AA is confident in her work approach and aware of the flexible nature of learning and that it can be improved. From the *Process of Learning* she suggests improvements to learning on the Design and Media Management degree.

AA's advanced conception of learning is reflected in her approach to studying. In carrying out the *Process of Learning* assignment she took a proactive approach to learning by interviewing the students in second year. She acknowledges that the *Process of Learning* has not changed her views on learning.

The benefits for her have been that she recognises the importance of thinking about how we learn leading to improving learning methods. Secondly, she states that she has become more flexible in learning having examined how she learns in first year Design and Media Management. Thirdly, she makes suggestions in her assignment on how the Design and Media Management course can be improved. Therefore, a student with an advanced conception of learning benefits from a fundamental, introductory course on critical thinking with recognition of the importance of improving how students learn as well as making suggestions for improving pedagogy on the Design and Media Management course.

### 8.2.3 Interview with BB, 14.6.93

BB discovered Design and Media Management through the PCAS book while looking for an interesting course. It was the only place that accepted her, she was really excited by the course upon investigation. She describes first year Design and Media Management as having nothing set, offering the student the choice of what s/he wishes to specialise in, and basically doing a bit of everything from across the college departments. She is enjoying the course and looking forward to second year. If there are problems it has to do with the facilities not being adequate for her specialisation, and teaching practices not corresponding with the espoused aims of the course as stated in the course prospectus.

We then discussed the *Process of Learning*, which she felt was intended to break down your thoughts on how you learn. As a learner she is 'slow to grasp it, but when I have grasped it, it's fine.' She emphasised the importance of learning and states that it occurs ('you gain knowledge') from individual and group work. For her learning occurs throughout life, and that the 'more you learn the better, you get more wise, and you can advise people and you know what you are doing.' She does not feel that it changed the way that she learns. She did the assignment on the *Process of Learning* reading through the handouts that I provided. She is finding it different to anything else that they were doing,



such as other assessments and essays, and more difficult as well. As an example she compares it with an essay being done for Design, and finds the *Process of Learning* assignment to be more structured with less room for manoeuvre, and difficult text.

She does not feel satisfied about doing the *Process of Learning* deeming it as being unnecessary and common knowledge anyway:

If you didn't know the different ways of going about doing something then it is useful but, I assume that a lot of people would know that already, doing A levels and doing different things they have done, knowing that if you go to the library and copy it out of books, it is going to be completely different to do your own research, than if you use somebody else's research. Is that what you mean? Seeing other people in groups, talking to other members of the group, you know who you can and cannot work with. So you learn that through the group.

For her it is not 'terribly useful unless you were intending to study psychology or theoretical subjects in second or third year, but we didn't expect this, in choosing Human Resources.' On further reflection she describes Human Resource Management as less clear than the other modules on first year Design and Media Management. She describes reflection as a new idea for her and as difficult to do. She does not feel that there are many benefits to be derived from reflection - 'I can't think of anything really apart from the group and individuals, I think you know, really know if you can work in groups...' Having commitments outside of college such as part time work puts reflection down the list of priorities.

It is not clear what the outcomes of the *Process of Learning* course may have been for her:

If somebody came up to me and said do you think we should do this (*Process of Learning*), and I give them advice and say look, if you go into the lecture make sure you are wide awake and you'll participate fully, otherwise it just goes straight over your head.

In terms of conceptions of learning she rates number five as most important seeing learning as memorising as leading to loss of information. Lack of understanding of the course was attributed partly to teaching methods, as she did not feel the purpose of the course was clearly communicated, and the use of difficult language.

It was clear that you were trying really hard to make us understand what you were talking about but it was clear that it wasn't being understood. We didn't know what we were doing for any particular purpose. It is really important before you try and do something you gotta know why you are doing it. And to understand the terminology as well. I mean a lot of people on this course are into design or into marketing whatever, they are not, you know brilliant at English and that kind of thing.

While she felt that I really understood what I was doing as well as possibly a lot of other students yet she attributes some students sitting quietly in the class just trying to understand the course. The presentation or discussion hosted by Scott the graduate of Design and Media Management, was appreciated by her - '...I have learnt that I have got to decide what I want to go into and specialise, that's really important and he kept stressing that.'

In conclusion she is very pleased with the provision of resources such as in photography and feels that what they are 'actually doing is great', but feels that improvements could be made by staff in organising themselves more and being more communicative with students. She is referring specifically to having to travel in from afar to find out that lectures have been cancelled.

#### 8.2.4 Analysis of BB Interview

BB does not feel that the teaching on Design and Media Management meets the espoused aims of the course.

The *Process of Learning* for her examined breaking thoughts down and was different to anything else that she had experienced in learning. Learning for her concerns making a break through to finally grasping an idea or concept which suggests a conception of learning with a certain sophistication. Recognising that learning can come from different sources she argues that it occurs throughout life and equates it with increased wisdom and being able to advise others.

The *Process of Learning* was unnecessary she said other than in a remedial sense - it is common knowledge she says for any student that has studied at A level to be aware of group dynamics or be able to draw the distinction between primary and secondary sources of knowledge. For her the *Process of Learning* was 'too psychological' and she found reflection difficult and without benefit. Reflection is not a priority when you have so much work to get through as well as having to work part-time in order to survive at the college. This suggests how outside influences can affect the quality of student learning. She rates conception number five as the most important. The *Process of Learning* was also difficult she said because of the difficult concepts and terminology being used and greater clarification of the purpose of the course needing to be communicated to some students.

While BB clearly understands the purpose of the *Process of Learning* she does not believe that it has a purpose for her in learning. Whereas she has the same progressive conception



of learning as AA, she differs in that the *Process of Learning* should only be used in a remedial context. She feels that it should only be used with students having difficulty with their studies. The course becomes a burden for her on a course already packed with degree modules which she states are the priority. It is clear that she is only intent on studying the course content and sees the *Process of Learning* as difficult with its concepts and purpose less clear.

#### 8.2.5 Interview with CC, 14.6.93

A mature student, CC had studied on a journalism course and wanted to continue in the area of media. Having inquired about a whole range of courses dealing with media and in PCAS book, she chose Design and Media Management because she felt that it was very media oriented yet not too theoretical. She describes Design and Media Management so far as being design oriented but with a heavy emphasis also on management and marketing. Also mentioned is the choice that students have in taking their own subjects. She enjoys the course yet is not as enthusiastic about the core subjects such as economics, looking forward to second year when she can do the subjects that she really wants to

She feels that most teachers on Design and Media Management are very good, yet she points to a conflict in some places where the teacher does not give guidance on how to structure work. The teacher leaves it up to the student to choose what to do, yet does not offer enough encouragement for student inspired ideas and interpretation:

It is quite frustrating because they don't give you the guidance in the first place, but they don't like it when you do it from your own head.

The *Process of Learning* course was described by her as being,

... about breaking down your own thoughts on how you learn. I mean nobody stops to think about how they learn, or why we don't really enjoy something or others they enjoy more. So it helps you to focus on things you enjoy and things, you learn about yourself, yea that is what it taught me.'

As a learner she prefers to work individually with room for creativity. While liking to work in groups she does not like to be coerced into someone else's 'rigid way of thinking.' Being interested in the subject is important in improving the learning and memorability of the subject as well as the teaching method. She makes a distinction between knowing and learning, associating a dynamism with learning, making breakthroughs in understanding:

I think sometimes you know things but you don't quite know why they are like that so then you

suddenly learn why it is like that and suddenly everything clicks, and then that happens all the time, you just don't learn it in order, and when you learn something it helps you to expand what you are interested in.

Had studying the *Process of Learning* changed her views on learning? It has increased her awareness of the different ways that people learn, and more questioning of the way in which she has been taught things. However she feels that she already has found a way of learning that suits her and says she is unlikely to change her attitudes on this.

In doing the assignment she was at first unclear but then following consultation with myself (the facilitator) she gave it a structure. She read all the theory and found it difficult to put her own thoughts and personal feelings/experiences on the report without sounding as though she was just talking (a reference here to the subjective side of the report). Some of the theory (in the handouts) she found difficult because of the language used, thereby losing the essence of the article:

I found it was difficult as well. I thought it might be easier before I started, but then I realised when you have to write down your thoughts on the course, you don't want to make it sound as if you are just talking, .... but then some things you just can't say very formally because it is just the way you think. ...someone could write out the theory [Kelly] a bit easier.'

She would prefer if the *Process of Learning* was not on the course, apart from being a counselling technique for students having problems with their learning, or in determining whether certain teaching methods are working or not:

I would prefer *the Process of Learning* out! Because I mean it is interesting because you can reflect on how you learn and learn about other ways of learning but it doesn't really change anything. You are not going to start saying 'Right well I'll learn in this way in future', because you just learn how you learn. And I don't really see the relevance of it.'

Reflecting is a new idea for her, which she feels could help in decision making such as weighing up options and their benefits before making a choice. Of the five conceptions of learning, number four was most important to her. Further she describes her awareness of a distinction between subjects which are factual such as design and those subjects which involve questioning and a element of confusion associated with such subjects and having to question the theories:

I think it is the subject though because I have done psychology before and it is always a questioning subject whereas other subjects or always, you just accept the way it is or you create it for yourself. So I find that confusing. So you always have to question theories and there are so many theories



you have to be ... as objective at the same time. ... because with psychology there are so many different books, different theories and all the rest of it, but with design you know all the books say the same thing. I mean different critiques and so on but yea...

I asked her about her thoughts on the teaching of *Process of Learning*. She acknowledged that I was enthusiastic about the course but felt there were problems in its communication. She felt that the purpose of the course wasn't fully explained and so she didn't understand why or what it was about thereby finding it difficult to do. She also felt that some of the theory that was introduced in the course could have been explained better:

I agree I think we should know why we are doing it, because we often didn't know. I didn't even realise sometimes that we were trying to learn about learning, I didn't know what it was for at all. I just had to do it! Talking to the graduate in Session 4 was helpful she said as it helped inform on option choice, but she did not gain much from the tape session.

### 8.2.6 Analysis of CC Interview

CC as a mature student, equates learning as a bit wasted when it does not count in the future degree result. This is how she views first year learning, suggesting that her orientation towards learning is vocationally oriented. A difficulty she finds with the Design and Media Management teaching is having the freedom to do your own thing but without the right encouragement from the staff, thereby leading to frustration.

The *Process of Learning* she feels engaged the student in breaking down her thoughts on how she learns which would not be done otherwise. From this she feels you learn about yourself but she does not imply that change in approach may emanate from this awareness.

Learning requires space for thinking, and essential is an interest in the subject for her as well as the quality of the teaching. Here she distinguishes between learning and knowing, describing learning as dynamic in leading to understanding, in making a breakthrough. In studying the *Process of Learning* she had become more aware of how people learn and stated that she was more questioning of how students are taught things (a reference here to the learning activities part of the course). She is resistant however to the idea that she would change her own style of learning as a result since she is content with her present approach. The *Process of Learning* should only be provided in counselling students that are having difficulties with their learning she argues preferring not to have it on the Design and Media Management course. It could be improved through better explanation of the concepts and purposes.

The idea of reflection upon her learning was a new one for her that might benefit her in choosing amongst competing modules for second year. Conception number four is most important to her in Saljo's scheme - she finds memorising time consuming. She distinguishes between subjects that are factual and those that are questioning and finds the latter difficult in creating 'confusion' through engaging the student in having to choose amongst different theories.

CC has much in common with BB. Both have an advanced conception of learning and see the *Process of Learning* as useful only in a remedial context. Both benefit from the course however by becoming more aware of how they learn while at the same time requesting that clearer examples and explanations of the aims of the course are given to them. CC also states that she has become more questioning of the Design and Media Management course. Finally, both are content with their present approach to learning and do not wish to change their approach.

#### 8.2.7 Interview with DD, 11.6.93

He found out about Design and Media Management at Hendon college. He choose to study Design and Media Management as he had a keen interest in media and in production and found the idea of combining these with 'budgeting' and theory appealing. He was disappointed in that the course appeared to him to differ from that advertised by concentrating more on marketing side with 'a few media modules'. He feels that the course is about becoming a proficient manager - 'everything in the field revolves around management and marketing.' He does not sense that the modules are linked together in first year from his experience:

They gave us in the Design module work to do, I had this feeling that I was just being tested as a manager. The Design and Media Management course is the psychology of preparing to be a manager, preparing how you behave in the work place in the end.

He enjoys certain parts of the course namely photography and design and Human Resource Management from a theoretical point of view:

I find Human Resource Management interesting from a theoretical point of view. I would like to know more, about different aspects of psychology and sociology if possible for my own sake and to link them with media/cinematography where my deep interest lies.

The course has not met his expectations so far because like other students coming from Hendon they were expecting to be studying primarily '...a media studies course degree'. 'It



was completely different from what we thought it was. I was really disappointed that there were modules I couldn't stand like statistics. .... I can see how they link, but on the other hand I don't want to be a statistician.' Referring to group work as being essential in large project undertakings, he found it very hard, personally preferring to work individually.

In asking him about the *Process of Learning* he described it as:

... just trying to show us how learning works, what methods we use, how we engage ourselves in this process, trying to learn something, not as simply taking a book and reading, trying to learn it by heart and then reciting it at some point but Learn, with a capital L. It is difficult, not what happened in the class I found difficult, it is what I think of the whole process of learning, of the whole mechanism.

He felt that students must find out things the hard way for themselves.

Learning for him consists of experience and repetition and reading books as well:

It is everything really. I believe that, you never stop learning, learning never stops one way or the other. You need the theoretical background as well as experience so that you can sort of modify your thoughts and tie them up, put them in a stream and deliver them.

He felt that his views had changed having studied the *Process of Learning*. While being flexible in learning he feels that his approach to learning has changed without specifying what that change is, and how he might use it:

For me it has changed my approach to learning, but I never had a set idea of learning. You can learn from a text book which has been going on for years and years, but learning from a text book is not enough. Here [on Design and Media Management] they just give you the minimal amount and you have to do the research on your own in the end. It has got the pros and the cons - because it does depend on how motivated you are in the end. I mean you can give the student the minimal input here and then say 'OK go and do the assignment', and you have to hand it in 6 months later. You can sort of get lazy [with this deadline], and not do the work, because you have so much time, a bit of a tricky issue.

In doing the *Process of Learning* assignment he read the brief, then discovered he had to use both theory and experience and then read the references, materials, handouts and proceeds. He feels a little confused so far as he works them out in relation to the assignments and attempts to weave the elements together of experiences and theory. I asked him about his feelings on studying *Process of Learning*, and he felt that the Design and Media Management course was about preparing students to deal with working in a

professional environment and not in becoming a teacher:

This course [Design and Media Management] does not prepare people to be teachers [a reference to the *Process of Learning*]. I think this course aims to prepare people to deal with difficult situations. Like for example, the Sonara desert exercise .... how are you going to arm yourself when you go and get a job. I believe that this is the aim of the course namely, just to show you alternative ways, how to do things, how to survive in a professional environment. Maybe the *Process of Learning* is useful, maybe you should focus on this, have more lectures. I think it would be better if there was some lecture type learning as well, ..., and then have the workshops as well that deal with the process of learning. But then again people on the course cannot find link with media in the end [with the *Process of Learning*].

He was familiar with the idea of reflecting upon learning but not with experiencing it:

I had heard about it. It [reflection] is not new, but it is new as an experience. ... my education so far is dealing with subjects such as history and the teachers and lecturers were not interested in how I learned history, they just wanted to teach me history, to know the facts in the end, .... , or say photography the teachers so far they just want me to know how photography works. They were not interested the fact that I was learning in a certain way using a certain method. They are only interested in the end that I knew.

As a mature student he feels you are more motivated and clear about why you have come back to study and what you want to study. He feels that the question is not how to learn but what to learn and what outcomes one wants to achieve:

... being a mature student, you have certain ideas on what you want to do, and you don't decide to do a three year course just in an academic level. You always have some work in your mind. So if you decide to go back to education, it is because you need a degree or something that says you are qualified in a certain area so you can pursue the job, occupation in the end. So your main problem is being interested in video film, television say the media. I was looking at the type of knowledge that would enable me to understand the workings of those areas, the creative part of those areas. For example somebody wants to exercise the cassette players on television. In the end, a lot of people my age don't care how they learn they just want to learn. In my own case I just want to learn and utilise it, and come out with certain products which I think I am capable of. A lot of people my age just do degrees because they want to get a better job. But I value learning in a certain area, it is easy to be interested in some thing and know a lot. It is easy to be interested in cinematography and know who did what and when they did it, who they used what kind of equipment they used. But in the end this is not important.

He states again his unhappiness with the course in not meeting his expectations as it does



not match the Design and Media Management prospectus which involves 'learning the process of designing a media product and managing it as well, pushing it in the marketing [domain]'. The course Design and Media Management is perceived by him as leaving the responsibility with the student to work on their own initiative and improvisation. If there are barriers, they are put there he feels by the individual in having a set idea on what they want to do:

... this course requires you to do the work on your own, so you have to convince yourself that you can do it, and you have to try and find the resources yourself.

I asked what he felt the outcomes of engaging the *Process of Learning* had been. He felt that it was useful to understand and realise how and why you learn. He stated that through awareness of different ways of learning the student can choose what the best way for him/her is to learn leading to the best results, to 'classify your thoughts, classify what you had in mind, be able to pick it up, use it in a constructive way sometimes'.

I asked him to read the five conceptions of learning. He felt that learning as a quantitative increase in knowledge is important not in becoming a walking encyclopaedia but only if it can be used constructively, likewise with learning as memorising. For him, it depended upon the context of learning. He cites 3 as most important seeing learning as the acquisition of facts which can be retained and used in practice. Yet throughout he sees memorising as a concomitant with all of them:

I am not saying that learning is just memorising and I am not saying that learning is increasing your knowledge so that when you go down the pub and you have a few beers more you start talking about things that nobody wants to hear, like some people do. The thing is, everything is valid in those statements[ conceptions 1-3]. I think they are linked.

He expresses anxiety about the course not meeting his expectations again as he feels that he gave up a lot coming from another country to live in London and make a living there. The motivation of the students and the teacher is the crucial element in learning he feels. Also he states how students will switch off early on if they feel that they are not understanding something very well and just chat amongst themselves or just show a blank face. A danger of group work he associates with this in that if they are not committed then you as a committed member of that group may miss out. He feels that Design and Media Management year one should be more clearly defined in terms of what to do and what outcomes to expect. This clearly is problematic for him in having very strict preset expectations of the course not being met and finding it hard to imagine the type of career that he may enter afterwards. This is of great concern to him as he is a mature student with clear ideas of what he feels he wishes to study and the area where he wants to work later:

I was just trying to imagine myself having a Design and Media Management degree linked with a certain profession, and I couldn't see what it was devoid of my personal feelings, my ambitions, aspirations whatever .... I find myself doing something towards a certain kind of job, a certain kind of occupation I want to do in the end. It can be frustrating, disappointing and stressful in the end, because I am not 18, I wish I was 18 so I had the time to waste... but I am 10 years older, 28 and when I finish this course will be 31, then I have to start all over again, looking for a job which I did 6/7 years ago, looking for a job, applying for a job and it is a whole new start for me.

### 8.2.8 Analysis of DD Interview

A mature student, DD found that the course was different in first year to what he expected based upon the prospectus, and he dislikes less relevant aspects of the course.

For him the *Process of Learning* showed how learning works, a look at the process, which is quite difficult. Learning involves experience and repetition. He sees learning as lifelong and also as encompassing a theoretical element. Having engaged in the *Process of Learning* he stated that his learning has changed. He suggests that Design and Media Management and *Process of Learning* are at cross purposes with each other. Design and Media Management prepares the student for work in the professional environment, for dealing with difficult situations in a future occupation in media, whereas the *Process of Learning* he feels is more geared towards someone wishing to go into teaching. This is not the purpose of Design and Media Management students he argues. He does not see a link between the *Process of Learning* and the media side of the course which is of most importance to him.

While being familiar with the idea of reflection he says that he has no experience of doing it with his learning. This is reflected importantly in his past where he mentions how teachers were not concerned with how he learnt but rather with what he knew about the subjects that they taught him. Crucial to his motivation as a mature student is the desire to concentrate on the 'what' to learn. He justifies this by arguing that mature students like himself return to study in order to achieve well defined outcomes such as achieving a degree which may lead to better job opportunities. In other words mature students know why they are there, they want to learn the content of a particular subject and correspondingly to achieve certain products or objectives.

The student's comments were that Design and Media Management leaves the responsibility for learning with the student. He feels that it may be helpful to have an awareness of learning methods in order to get the best results. He finds conceptions 1-3 of



learning equally important according to the context of learning. He expresses anxiety concerning his being a mature student and the course being different to what he expected as he left his country, his work to embrace Design and Media Management. His anxiety concerns procuring work at his age upon completion of the Design and Media Management degree.

DD's conception of learning regards knowledge as the acquisition of facts which can be utilised in practice. Therefore one can anticipate his rejection of the *Process of Learning*. For him, there is no link between his reasons for studying Design and Media Management and the *Process of Learning*. He states that the course is best suited to individuals intending on joining the teaching profession. This belief is further supported by his coming to college as a mature student with the express aim of studying a course which will lead to a professional career. This emphasises the need to clearly express the aims and purpose of critical thinking courses in the first year curriculum.

#### 8.2.9 Interview with EE, 8.6.93

Having worked for a number of years, EE had been thinking about doing study. She passed by the college, picked up the prospectus and following a chat with DG she chose to study Design and Media Management. She sees the course in year one as being quite varied and diverse, in attempting to give a broad outline of options available, yet she feels that it is all linked together. She enjoys the course, seeing areas for improvement attributing this to the college making the transition to University status:

I am enjoying it as a mature student, I was a secretary before, I enjoy learning, I did many jobs before that did not require much stimulation, so that is what I am really enjoying. I enjoy media, art and marketing.

She states that it has met her expectations though finds this hard to answer as it is difficult to remember what she thought before:

In the beginning I found it quite an adjustment because I had not studied for about 10 years so it is more difficult than if you were a school leaver. But I came in open minded knowing that it would not be a bed of roses.

For her the *Process of Learning* was about determining:

... the best most effective methods of teaching and learning which enable students to learn as well as possible, and I suppose just by analysing different methods either by teaching, reading or

listening to see which ones work best. I suppose they were effective but at the time I wasn't absolutely certain what the reasons were (for studying the *Process of Learning*), what we were going to get out of it and what way to take it.

More feedback was essential she felt so that students knew why they were studying the Process of Learning:

Feedback is so important really that is the most important thing and that is my experience and that of other students. Of course maybe you had reason for not explaining such as looking for spontaneous reactions.

She prefers to learn through being taught preferring 'people to tell me how to do something rather than reading. I prefer instruction.' Acquiring knowledge, experience, the link between knowledge and experience and its (knowledge) application with confidence, and the need for more exercises and encouragement to work outside the class are central to EE's concept of what it means to learn:

Absorbing new knowledge means a lot to me. I think it is about knowledge and about experience ... but in order to be able to apply the knowledge with confidence you have to experience it as well.

She does not feel that her views have changed having done the *Process of Learning* and assignment. Nor has she changed the way that she learns as a result, other than a little teachback practice and discipline. In doing the assignment, she read all the handouts and will do a few notes on topics. She feels apprehensive about doing it as she needs time to absorb the concepts so that she can see the assignment far more constructively and break things down more easily and become more familiar with the subject.

Like another student, she feels that the *Process of Learning* has more to do with psychology and less to do with the Design and Media Management degree:

I think it is interesting to know how a human being actually does learn, thinking about the brain and how it works, but if you mean am I interested in how I learn as a course I don't know if that would really work on Design and Media Management because that's more to do with actually understanding psychology, not to do with media/design. I don't really know if there is a place on the course to be quite honest. I really don't know if every student wants to know about learning processes. However I am interested.

She finds reflection difficult to do yet questions things a lot but is not so keen on how to 'analyse learning'. The outcomes of studying the Process of Learning for EE have been:



Well, just that I have actually consciously thought about it, and it has made me more aware of the different processes there are to learning, and that there is not just one way of learning, but that there are different ways of approaching it, and that is the first step. Conceptions one, two and three are important but learning as memorising is not that important to me. The acquisition of facts - that is important, also a quantitative increase in knowledge is important.

In terms of the teaching she did feel that she was lost in places, wishing that the reasons for engaging in the *Process of Learning* were made clearer. She also felt that it could be a little more structured and 'not too open ended, because students like a certain amount of direction, structure'.

#### 8.2.10 Analysis of EE Interview

EE is a mature student having worked for a number of years before choosing to study on Design and Media Management. She is enjoying the course, finding it very stimulating and a welcome change from her work environments in the past. She is open minded in that she came to studying the course, not expecting it to be a bed of roses.

She describes *Process of Learning* as striving to engage the students in analysing different methods of teaching and learning in order to discover the most effective methods. However it was important to have more feedback she says during the course. She prefers learning through being taught, yet links this up with the need to experience relevant to new knowledge or ideas, to be able to make this link with confidence. She does not feel that this has changed since doing the *Process of Learning*. For her the *Process of Learning* represents something more to do with psychology and less to do with Design and Media Management. While she finds the *Process of Learning* interesting she feels that it is not relevant to studying media and design. She is interested in reflection but not in the analysis of learning as she describes it.

The *Process of Learning* has created an awareness within her of the different ways that learning can be approached, through consciously reflecting upon it. In Saljo's conceptions of learning, number three, the acquisition of facts and learning as a quantitative increase in knowledge are most important for her.

Like DD in conception of learning, EE similarly feels that the *Process of Learning* has any role on the Design and Media Management degree. She does not see a role for analysing learning on the course even though she accepts that it can lead to an improvement in learning for students. As with the first four interviewees, she has become more aware of how students learn in this introductory course. She has become aware of the concept that

some ways of learning are more effective than others. Similarly she states that its relevance to the first year course must be clearly stated. This becomes an important issue so far to students. They are concerned that the purpose of the *Process of Learning* is not immediately seen as relevant to their studies.

#### 8.2.11 Interview with FF - 21.6.93, Self- Report

She was attracted to the course by its 'name' and got admitted through PCAS. FF got the prospectus and was interested by the course details as well as its location since it was near her home. Design and Media Management for her is about 'learning how to motivate yourself, about how to work on your own, also how to get on with other people and how to work together with them'. While referring to the content on the course, she says that the priority of the course is to learn about coping in different situations and about 'managing generally'. As a mature student she is glad to have re-entered education despite initial doubts. She is enjoying the course especially the time they get on their own to plan and carry out their objectives/interests.

Assessment was working out fine for her, she knew what assessment and teaching methods to expect without actually elaborating in the interview. She describes awareness of the importance of being motivated in order to progress on Design and Media Management which can be a problem for some students. She questions the relevance of some of the courses that they study (such as economics and accountancy) since there are specialists in any business trained for this undertaking. Yet she indicates the usefulness of knowing a little about these subject areas.

For her the *Process of Learning* was about,

... the way we learn and the ways we are assessed and the methods of teaching the methods of working.

Being interested in a subject/topic is important for her as a learner and she prefers to learn through experience, giving an example of how Design and Media Management encourages this type of learning such as in the studio:

Learning means to experience and to put that experience to use in other situations. It means to be more capable, it means to be better equipped for life, to be able to relate to other people.

Having studied the *Process of Learning* her views about learning had not changed in terms of how she approaches learning (apart from communicating ideas to another). It has made



her more aware of how people learn. However:

I haven't changed my approach to learning, which I've always considered to be a good one anyway.

She felt that the assignment for the *Process of Learning* was more useful to the course designers rather than meeting the needs of people studying Design and Media Management,

I am glad it was on the first year and this (*Process of Learning*) wasn't part of the degree because although self evaluation is going to be a part of life and a part of any job, I feel the degree itself should be more specific.

She had worked on the assignment since *Process of Learning* began having read the assignments some of which she found were too long or irrelevant to what they were studying. Despite these problems she found the assignment interesting to do:

The first thing I suppose I did after comparing what I had said after the first semester was to literally write down the criticisms and things I enjoyed about the Design and Media Management course. Then kind of structure those and find a way in which this theory would help me understand my feelings towards them.

For her the *Process of Learning* has an important role to play yet she also offers some caveats:

The benefits have to be that you look at your own learning, and the way you learn and if you feel it can be improved then you improve it. Obviously in second and third year you want to learn, you want to spend the time in learning as quality time rather than when you don't learn anything at all. I also think that anything which is a self discovery, then you might end up discovering more than you bargained on. Some of the difficulties are however that some of the students aren't interested in this sort of thing. We came here to do an art and design and media course. We have enough problems with people opting out and not turning up for lectures and on the management side ... adding another side to this [namely the *Process of Learning*], another type of management course which is really what this seems to be - I don't think that this helps us feel that the course is anymore media orientated.

Reflection is a natural part of living for her which she feels is not difficult to do and is done by '99%' of people every day in looking at their personalities and methods of doing things. The barriers to this reflection are personal opinions, '...but then reflecting is really reflecting upon your opinions of something as well, isn't it?' I asked her what she felt the outcomes of studying the *Process of Learning* had been and she mentioned an increased

understanding of group learning dynamics, and an increased understanding of the Design and Media Management course rationale.

In examining the five conceptions of learning she stated:

Before this course I would have said learning as the acquisition of facts method etc. which can be retained when necessary. I still think that this is really it, as long as those facts and methods are used creatively. Although now I can see more what you mean by learning as the abstraction of meaning or understanding reality.

The *Process of Learning* teaching was good in terms of increasing her awareness of and prognosis for problems concerning the Design and Media Management course. She felt that I (the writer) could improve my teaching in communicating. Some students were unaware of the scope of *Process of Learning*, considering it to be just 'a couple of lectures' within the Human Resource Management module. The sessions were too long she felt. However she was enthusiastic about doing the assignment.

She does not feel that the *Process of Learning* should be continued into years two and three as she argues that students came to Design and Media Management to study a design course where most had anticipated more design and media than they actually get. This is how it will be in second and third year she predicts. Students feel used she says in having to be part of the *Process of Learning* evaluation asking why they have to do all the work for the facilitator:

If you really think about it however, obviously the students are the best people to pinpoint problems and good points about the course.

#### 8.2.12 Analysis of FF Interview

For FF, the Design and Media Management degree is about being motivated. It is about learning how to motivate yourself and also, learning about how to work individually and how to work in a group. As a mature student she says that the motivation is crucial to the course. She questions however the need for such a range of subjects on the degree being necessary as people specialise anyway, though she concedes that it can be useful to know about the different aspects of the business.

The *Process of Learning*, she felt, examined why we learn, work, are assessed and taught. As a learner she feels that having an interest is important in the subject as well as relevant experiences, which she feels is encouraged by Design and Media Management. Learning



is about experiencing and being able to apply those experiences so that one becomes more equipped in life and in relating to other people. She does not feel that the *Process of Learning* has affected her approach to learning yet acknowledges that she has become more aware of the type of issues that can be involved. All in all she states that she is happy with her own approach.

While recognising a place for self evaluation she would not like to have *Process of Learning* on the course, as she would prefer to spend the time on more specific content focused on media-design. She adds that self evaluation might lead to revelation about oneself. As far as she is concerned the students have enough problems and enough work to do without having an extra subject (*Process of Learning*) added to the management side of Design and Media Management.

In Saljo's conception of learning, she rates learning as the acquisition of facts as the most important. Further she says that now she sees how learning might also be linked with the abstraction of meaning. She is not sure if the *Process of Learning* has influenced her conception of learning. The *Process of Learning* could be improved she feels through better communication of purpose of the module.

Understanding of group learning, the Design and Media Management rationale and prognosis of problems on the Design and Media Management course are the main outcomes of learning from the *Process of Learning* for her. She would not like to see the *Process of Learning* in second or third year, as students have come to study and learn about Design specifically. She adds that a few students felt used having to participate in the *Process of Learning* (which she feels is more for the benefit of the course designers), yet also she sees the need for innovation. Finally Design and Media Management could be improved she says through greater integration and structure across the modules.

FF has also become more aware of learning processes through the course. Again, like previous interviewees she would prefer to spend the time instead on studying specific course modules. There is clear resistance from students (BB,CC,DD,EE and FF) to studying material not immediately seen as relevant to their studies. Though there have been gains for FF in studying the *Process of Learning* she is not keen to see it on the degree course. Her conception of learning is number three where the acquisition of knowledge must have a practical application. The purpose of the *Process of Learning* does not become clear to students with this conception and consequently they are likely to become impatient with such a course.

## 8.2.13 Interview with GG, 4.6.93

GG chose Design and Media Management because it contained a media element. She describes Design and Media Management as a 'mixture of 3 degrees put together, aspects of media, management and design.' She feels that media on its own constitutes a degree, and that having an arts degree makes life a lot easier on the course despite the prospectus saying that it was not necessary. She wants a degree specifically in media management, yet in the back of her mind she can see the relevance of studying design. Motivation is important to keep going on the course she says. She describes feeling disappointed with the course not having met her expectations such as lack of organisation (deadlines for assignments, lecture cancellations), too many students and anxiety concerning her future career:

What it boils down to is that college has university status now, it is like a business, namely to get people in on the course, and as IIII said it is going to be this this, this and this. Yet when you get here it is a different matter.

She felt that the Process of Learning engaged her in:

... stages and ways of how to be taught and how to learn. My psychology lecturer once said that 'they teach you but they don't teach you how to learn', and it is like ... if they taught you better how to learn like how to pick up points of information or to do things differently then when it comes to people teaching information you can open your mind up, but in your talk you accept it you don't question anything. And if you don't have an understanding of it then that is tough. I've remembered in maths like it is you have got formula to do things, ... you don't have to know why you just need to know the formula and I can't learn like that.

She is unclear whether the *Process of Learning* has aided her in this, until she completes the essay. As a learner being interested is crucial. She is interested in finding out 'things about life'. Learning for GG is about acquiring information. She says that there is a 'sense of power' with knowing more than another person, yet she admonishes anybody who would cut another person off with a differing viewpoint or assuming advantage because of possessing qualifications:

To learn is like, it is a source of power, as long as you can back it up, back up your statements, but there shouldn't be any right or wrong.

She has not got a grip on the aims of *Process of Learning*, yet has a better idea of certain topics on the course dealing with selection of information for example. She does not feel confident in doing the assignment due to the length (2,500 words).



The *Process of Learning* she felt could be used in later life and also in helping to get a better understanding of the other subjects, in learning 'about how you learn best' and thereby removing barriers that might have been there otherwise. Learning as the acquisition of facts was the most important conception of learning to her (after number one). The *Process of Learning* had not influenced her conception of learning she stated. Teaching on the *Process of Learning* was sometimes unclear, while on other occasions there was too much information she said, that I needed to take it just one subject at a time. She felt that the teacher could be more confident and clear in what I did as she felt that I (the teacher) knew what I was talking about on the *Process of Learning*.

As for Design and Media Management itself, staff needed to get more organised she said to:

... organise within themselves, to have discussions with one another, about how the course is going across the department.

The course could be improved through structuring it so that it work was spread out across the year and not just the last six weeks.

#### 8.2.14 Analysis of GG Interview

For GG, motivation is very important on Design and Media Management in order to progress on the course. Some of her expectations of the course were not being met, such as, a degree of lack of organisation as she describes it and lack of feedback and contact from staff. Staff also need to be in more contact with each other she feels especially in discussing how the Design and Media Management degree course is progressing across the department. At the time of interview, in light of what she would like to see improved on the course, she feels a certain anxiety in relation to her future career.

The *Process of Learning* she describes as examining the ways and methods of how to be taught and how to learn. She justifies this in terms of her past experience where teaching was about information gathering in a subject area but not about how to learn. She feels that there are benefits from the 'how-to-learn' approach. Using an example from past learning experiences, she describes mathematics as being concerned with the learning of formulae but not why the formula are used. She is not yet sure if the *Process of Learning* has helped her in this regard perhaps becoming clearer upon completion of the assignment.

As a learner it is crucial for her to be interested in the subject. Learning for her concerns

the acquisition of information. She equates learning with power, with the ability to back up arguments with evidence. However she qualifies the power connotation by disassociating it with a feeling of superiority over another. Also she indicates the importance and awareness that there are points of view that may differ from hers on any subject/topic.

GG perceives the *Process of Learning* she sees as helping in removing barriers to learning that may inhibit greater understanding of subject areas. She believes that it is important to look at how one learns in education, citing a past experience. In Saljo's scheme the most important for her, number three, is learning as the acquisition of facts. She is unclear about whether the *Process of Learning* has influenced her conception of learning. During the *Process of Learning* teaching she felt that there was too much information to absorb.

As with AA, there are benefits to be derived from the *Process of Learning* in first year for GG. She feels however that it needs to be simplified in its introduction to first year students.

#### 8.2.15 Interview with HH, 4.6.93

HH applied for Design and Media Management because she was interested in studying Public Relations and did not want to do a straight media degree. She says the course has not turned out to be what she wanted to do so far. Studying Design on the course has been difficult for her in first year. She did not have a background in design and felt anxious with some of the exercises that they had to do in first year such as cutting out circles and squares in the first semester. She can see DG argument for doing exercises like this, but at the time the difficulty was in seeing the purpose of why they were doing certain exercises and as a result it was difficult for her to be motivated in engaging the task. She could not see the purpose in the Design and Media Management early learning activities:

The reason why they want you to do circles and squares was to pretend that the circles and squares were text and pictures. For someone like me with no background of art or design really it doesn't make any sense but really what they were trying to get us to do was to look at text and think, and pretend that it was an advertisement you were doing and relate it to the images. But because they weren't teaching you that way, you weren't thinking that way and it is only afterwards that they are showing you the relevance of what that was exactly.

She seems to be quite anxious during her first year studies, partly motivated by her enrolling as a mature student with children, oldest is 13 years. While being clear about what she wants to do in her future career she feels concerned about whether the degree will



equip her fully in this aim of getting work:

I am a mature student, I haven't got the years to pay back and find my field. I know what I want to do, I mean this is my future, I have direction [as a mature student] , I mean in order to be here at college I have to account for why I am here, as opposed to not being with my family.

Finding lecturers in order to find out about course options is difficult she says. She suggests that one of the difficulties may be that Design and Media Management is attempting to be so unique that it may have spread itself out too much and lost its direction. Again she measures the course against some future prospect of work and is anxious that the course may not provide her with the appropriate abilities and specialisation. Further she feels that as a mature student with children that she should be given respect accordingly and reciprocally:

You are here to learn in education so you must take advice and criticism but to me you don't deal with me as though I am an 18 year old, I mean I got children of 13, that age group but I see myself on the same level as tutors. I give and expect respect from tutors.

She experienced the *Process of Learning* as an:

... increase in knowledge, how we acquire knowledge I suppose and learning. That is my understanding of it, not a lot [she laughs].

Involvement with the concept or issue to be learnt is essential she says for learning:

If I find I have got to learn something I have got to be able to turn it around all in my mind, and make it look like it is affecting me. Like the theories for examples, when I can bring the theories into my life, then I can understand it if I relate it to my life. It has got to mean something for me to be interested in it, for me even to begin to remember anything about it. Learning is about being connected with skills that can help you, all learning develops life skills, to get you through life.

Had her views about learning changed since studying the *Process of Learning*? She was having difficulty understanding so many concepts and theories. She could however perceive the potential outcomes of such reflection:

The more you understand about the *Process of Learning*, once you begin to read about it, then the more I am beginning to look at myself and question what makes me think a certain way. I'm bound to try and change it, if I see it is not going to get me where I want to get to; whereas if I don't question those things, if I just keep on thinking that way then.

For her the *Process of Learning* assignment was '...ambiguous or wide', like most of Human Resource. She would prefer if there were more clear cut directions. She stated that she was reading widely around the topic. *Process of Learning* is good she says because it creates awareness. She questions why it was not introduced in October, as it can aid in theory/model appraisal for example. She feels that *Process of Learning* should be included in the first year curriculum and compulsory if necessary, but it needs to be made clearer she says - 'I think it is good to have it in the first year. I picked up quite a few things'. She finds it difficult to do she says because,

We are not taught right how to increase our knowledge. At the end of the day I buy books on how to get my brain to work, because they don't teach you things like that, like ways to revise, how to revise, you're not given that.

Conception three of Saljo's scheme was most important to her followed by one and two.

What were her impressions of the teaching on *Process of Learning*? She felt that the 'lectures' were well prepared, but stated that there were problems in her not reading the handouts before the next session; in 'coming out with too much information' from the sessions; and in the sub sessions not being fully accomplished before the next sub-session, leading to a degree of confusion during the four sessions:

It is only now that it is sinking in, it comes back again. At the time I did not seem to get very much from it.

Finally she makes a comment about the tutorials feeling that she can be given the wrong impression about how she is progressing, and seems to express a need for a clearer account of how she is progressing. she feels that staff are not concerned enough about the students in this regard.

#### 8.2.16 Analysis of HH Interview

HH is a mature student with children. In first year she is anxious because she feels that the course is not meeting her expectations. She is having difficulty with the class exercises and in being motivated to do them. Design and Media Management is perceived by her as being competitive. Anxiety stems from her awareness of age, having children and feeling that her future career might not be concomitant with the Design and Media Management curriculum or training. She feels that the Design and Media Management degree is too unique and over stretched and feels that she should be given more respect by staff than being treated like she has just left A level education.



The *Process of Learning* she describes as dealing with how we acquire knowledge and how we learn. Learning about any issue must involve the person she believes. It is essential to be able to relate it personally otherwise it is forgotten. For example she talks about theories in this respect and the need to be able to relate them to your self. Learning also involves the acquisition of skills for life. She is not sure whether the *Process of Learning* has led to change in how she learns because she is still absorbing the many ideas and concepts introduced. Yet she can see the benefits of reflecting upon the process of how we learn - the key element being involvement in questioning how we learn and not simply accepting it and therefore remaining the same.

She felt that the *Process of Learning* should be introduced in October, semester 1 of first year in helping students become more adept at appraising theories for example. She feels that the *Process of Learning* should be included in the curriculum and even made compulsory if necessary, but it must be made clearer she says - it is only sinking in now how to increase knowledge she says. In Saljo's conceptions of learning, number three is rated most important.

### **8.3    *The Learning Context for Students Studying the Process of Learning***

#### **8.3.1 Introduction**

In section 8.2 above I described and assessed the responses of eight students to the *Process of Learning* and their first year learning experiences on Design and Media Management. In this section I examine how the students' learning experiences on Design and Media Management affects their experiences of learning the *Process of Learning*. I will elaborate further in subsequent sessions on many of the issues raised here. The following sections build upon and refine the insights made in the previous chapter. In chapter 7, I discussed the benefits of the course to students, the difficulties that they faced and I made recommendations on how it could be improved. For example, I highlighted the importance of addressing students' concerns about the purpose of the course in relation to Design and Media Management.

#### **8.3.2 Importance of Subject Relevance for Students**

There are mixed reactions to the course, many of which reflect students concerns in coming to terms with the transition to college. There is a big demand for media and design

elements of the course from students<sup>24</sup>. Many students felt that the espoused aims of the course did not match the reality having enrolled. For example some interviewees felt that there was a greater emphasis on the management side of the curriculum. Their interest seemed to lie more with the 'creative' side of the course as they perceived it, namely media and design. They were impatient with having to study subjects on the course which did not seem to have a link with the 'creative' element on the course. Further students perceived some elements of the course as less relevant such as statistics or accountancy, as their intrinsic interest lay in the 'creative' side of the course, or because they did not see themselves using it in a future career. From this one might expect that students could perceive the *Process of Learning* as being less relevant to their studies than other subjects on the course.

### 8.3.3 Subject Diversity on Design and Media Management

The scope and diversity of Design and Media Management subjects was discussed by many of the interviewees. It was felt that Design and Media Management might be too ambitious and broad in its scope. As a result a number of students have raised concern about the lack of integration between modules and the need for integrated assessments. Design and Media Management was perceived by some interviewees as being very competitive and business like in its approach. Year one was seen by one interviewee as just needing to be passed and as being preparatory for second year study.

Staff could improve the quality of learning for students by increasing contact with students. Feedback was crucial in enhancing learning for the student, feedback on student work, especially on assessed work. It was also felt that staff could be clearer in describing the purpose of exercises, tasks and assignments that the students engaged in. If students find something difficult to understand they were likely to switch off. This might occur as a result of teaching methods or where the student finds it difficult to comprehend language or concepts within a subject.

The *Process of Learning* was clearly affected by the concerns above. This included the problem of adding the course onto an already large curriculum which caused concern for many students.

### 8.3.4 Student Diversity on Design and Media Management

---

<sup>24</sup> This does not imply all students but indicates the views of several interviewees. It is important to recognise the range of issues discussed and opinions.



Students in first year Design and Media Management are diverse in terms of their ambitions, their orientation to study, maturity, concerns and feelings about the first year course. Many interviewees placed strong emphasis on the link between the training on Design and Media Management and a potential future career. The degree is perceived by many students in terms of how well placed they will be when they seek employment. Importantly many students here expressed concern or doubts about where the course would lead them, in other words they were unclear about the link between their training and 'a particular job.' For mature students there were problems or difficulties in making the transition from the work place back to college.

These factors clearly determined students' reactions to the *Process of Learning*. Chiefly, students with a clear aim of studying leading to a job in the market place had difficulty accepting the relevance of this course teaching critical thinking. They felt that it did not have a place on the degree course.

### 8.3.5 Students and Learning - Further Insight into Saljo's Conception of Learning

Some interviewees as we saw, distinguished between how we learn versus what to learn. This had an important bearing on many students reactions to engaging the *Process of Learning* course. Students who perceive the Design and Media Management course as enabling the student to develop products or goals that will prepare him/her for a future career, found it difficult on this course, which asked students to explore how they learn.

Learning was perceived by three interviewees as being able to use knowledge constructively, in linking knowledge with experience and in applying it with confidence. The element of confidence is very important in determining the quality of learning experience for the student, and was frequently cited in the interviews. The learning quality can also be inhibited by set barriers that the student may have to learning such as being unwilling to engage in certain tasks like commitment to group work, or in having an approach to learning which s/he is unwilling to change.

In reference to Saljo's conceptual scheme of learning it was evident that students tended to identify themselves according to a conception of learning. However several students indicated that they could see a context in learning where a less progressed conception of learning might be used. Therefore it is suggested that students having progressed to a particular conception of learning can 'regress' temporarily to a less progressed conception in order to fulfil the requirements of a learning task. This indicates that students use their conceptions of learning flexibly in order to meet the requirements of individual learning tasks.

## **8.4 Discussion: Teaching the Process of Learning - Syntax or Semantic?**

### **8.4.1 Introduction**

In this section, I address the central question of this thesis - does teaching critical thinking to first year students lead to greater critical thinking or is it a syntax without a semantic and therefore meaningless to students?<sup>55</sup> The subsequent sections respond to this question. The following conclusions are based upon the responses of the interviewees above. I suggest that the insights drawn are seen as contributing\* to the general conclusions presented in chapter 10.

### **8.4.2 Students Experience Benefits Emerging from the Process of Learning**

For many students the *Process of Learning* was different to anything else that they were studying in first year Design and Media Management by emphasising the importance of the way one learns. Half the interviewees perceived the *Process of Learning* as encouraging them to break down their thoughts on how they learn. They perceived it as a process which was proactively seeking to improve the quality of learning for them on first year Design and Media Management. The idea of reflection upon learning experiences was a new one for some of the interviewees, allowing them to focus explicitly upon learning activities within the course.

Students explained how this improvement could come about, chiefly by creating an awareness of the different ways of, and barriers to learning, or, as one student put it 'we were exploring how learning works'. This 'new' awareness was attributed to the *Process of Learning* by all interviewees. It is suggested that through this awareness, students can then begin to remove barriers that they may have in how they approach learning in particular situations. Instead they can begin to explore new approaches with a view to improving the learning outcome. For example, a student who conceives learning as conception 1 of Saljo's scheme becomes aware of learning conceptions which demand a more progressive approach to learning. S/he is introduced to the concept that one theory or model may be more reliable than another due to the empirical evidence supporting it.

Five of the eight students interviewed indicated that they had progressed beyond awareness to practical application of what they were learning. Most notably, two were becoming

---

<sup>55</sup> McPeck (1990)

<sup>56</sup> Including chapters 6,7,9.



more questioning of how they learn individually, and a further two were able to make suggestions on how to improve pedagogy on the degree course as a whole. These comments came from students with conceptions three, four and five of learning. For example, one student argued that students were the best suited to pinpoint problems experienced on the first year course. This has implications for improving teaching practice. Another student we saw, described how her views had changed on learning following the *Process of Learning*. She felt that there was a need for self evaluation in learning on Design and Media Management that was recognised in the *Process of Learning*.

It is interesting that a student with conception five of learning had listed more benefits from the course than any other interviewee. Having benefited as above, she also stated that she was now more flexible in her learning methods and recognised the importance of this course to improving the quality of learning and teaching on Design and Media Management. She had taken the initiative to suggest practical improvements to the degree course.

Further gains from the course came from students with conception three of learning. While none had taken practical steps which might lead to improvements on the course, they did however recognise that this was possible or that the course could lead to removing barriers to more effective learning. One such student interviewed, stated that the course should become compulsory from the start of the academic year.

These benefits, stated by students above, attributed positive outcomes from the *Process of Learning* to their learning. They believed that there were gains to be made from this course as follows. The potential was there amongst individual students to:

- acknowledge greater awareness of how they learn
- be more questioning of how they were taught and how this determines the quality of their learning
- begin removing the barriers to more effective learning
- approach learning more flexibly
- suggest improvements to the degree course leading to more favourable learning outcomes

Such benefits accruing from the *Process of Learning* would indicate support for Paul and Nosich (1991; also Siegel, 1989;1990; and Norris, 1990) who believe that it is possible to teach general critical thinking skills which are transferable across subject disciplines. It would seem to provide evidence disproving McPeck (1990) who states that such courses are merely a syntax without proper meaning for students.

I stated earlier that students were interviewed during or after the time that they were conducting their assignments for the *Process of Learning*. Therefore, the above interviews reveal feedback from students who were beginning to practically apply what they had learnt on the *Process of Learning*. At the very least, the benefits of this first year introductory critical thinking skills course would appear to be an important and meaningful (or semantic) foundation for improving student awareness of learning and teaching issues. As we saw, some students had progressed beyond this to becoming more questioning of how they learn and even making suggestions for improving pedagogy on the degree course leading to higher quality learning outcomes.

There were negative reactions to the course expressed by students as well. These are addressed in the next section to determine whether they support the belief of McPeck (1990) that such courses provide merely a syntax without a semantic.

#### 8.4.3 Students Experience Difficulties with the Process of Learning

Four students with conceptions of learning including three, four and five believed that the course was unnecessary and that they were happy with their own approach to learning. Such students 'knew' instinctively how to react in different or difficult learning situations. For example a student mentioned how she would know whether she could work with fellow group members or not and did not need to reflect to find this out.

Two students with more advanced conceptions of learning (four and five) felt that the course was useful only in a remedial context. They felt that it was common knowledge and would not change their approach to learning which worked well for them. In other words they felt that it should only be used where students required help with the study and thinking skills. Three students felt that the time would be better devoted to areas of the course where their interest lay such as in design or media projects.

The *Process of Learning* was seen as difficult and at times complex. Three felt that there should be less information as this led to overload and less time to explore the topics in the sub-sessions. Five interviewees (with conceptions of learning three, four and five) felt that the course needed greater clarity, more examples from the course and greater definition of purpose from the facilitator. It was seen as being linked with the management side of the course which was already over loaded at the expense of media and design elements.

Students that perceived Design and Media Management in terms of their future career prospects, often felt that the *Process of Learning* was a distraction from this, serving the interests only of staff doing research into improving Design and Media Management



course. Three students believed that such a course was best placed for teachers interested in teaching and the psychology of learning.

Four students stated that success in learning could only be measured through formally recognised grades and achievements such as examinations, portfolios, project work. This perception originated either through previous schooling such as in A levels or on the first year of Design and Media Management. In such a climate reflection upon how one experiences learning was not perceived as a priority. A mature student interviewed was oriented towards achieving a qualification (product) that would enable them to improve their career prospects. Many students choose to study Design and Media Management because they felt that it offered a substantial media element. The *Process of Learning* was perceived not to be congruous with this expectation.

Students experienced difficulties with the *Process of Learning* as follows:

- it was complex and better suited to teachers or psychologists - namely those interested in how students learn
- it was useful only on a remedial basis for students with a less progressed conception of learning
- it was being integrated into an already overburdened degree course
- there was an interest only in studying subjects immediately relevant to the degree course and so the purpose was unclear
- it needed more relevant examples to the media and design side of the course
- it caused concern for students who were studying the degree course with the express aim of securing employment afterwards
- it was not necessary as individual students knew how to learn for themselves and were resistant to changing their approach now

The rationale of the Design and Media Management degree (chapter six) included introducing ambiguity into the course. This caused concern for many students who were being encouraged to doubt the validity of ideas and concepts studied on the course. Many of the above difficulties could be understood in terms of this ambiguity, because in the *Process of Learning* they were now being asked to examine how they learn. It is suggested that this could lead to greater concern for some students on the course. For example, students expressed concern with its relevance to the degree course and ultimately to employment opportunities thereafter. Also students who were content with their present approach to learning were not receptive to adjusting their learning approach with the possibility of improvement. There is evidence that some of the difficulties above can be caused by the learning environment and by the students' resistance to changing learning methods that work successfully for them. Students' expectations of the degree course also



conflicted with the aims of the *Process of Learning*. There are therefore responsibilities for the individual student and for the department which if met can lead to better integration of the *Process of Learning* on the degree course. For example, the support of staff across the three departments could lead to a reduced curriculum which would allow greater breathing space for a course teaching critical thinking.

However the above difficulties need also to be examined in terms of whether the course amounts merely to a syntax as McPeck (1990) argues. I remind the reader that this course was identical to the course taught to psychology students and therefore a general course on critical thinking. The key difficulties expressed above by individual students were that the *Process of Learning* was complex or 'psychological'; hard to relate to the media and design elements of the course; overall the purpose and relevance to the degree course was not clear; and that it needed clearer examples.

These difficulties would seem to support McPeck's belief that instead students need to think critically from within the subjects studied on their degree course. The fact that it was difficult to relate the *Process of Learning* to the design and media elements implied that it could only become meaningful from within these elements using clear examples. Without clear examples, the student is then less clear on the relevance of the course to his/her degree. Critical thinking consequently appears more complex than it actually is if pitched at the right level in an introductory course.

However, McPeck's argument can be refuted on a number of points. Firstly, it makes sense to use examples from the subjects studied by the students. This makes it more relevant to the students goals in studying that course. Examples could be used which were drawn from disciplines unrelated to the course which demonstrate the same elementary critical thinking skills. For example, learning how theories and models are constructed, challenged and refined or refuted can be taught to first year design, mathematics or medical students. But it is crucial that this exploration for the student is relevant to their first year studies otherwise it serves little purpose to their studies. The findings do concur with McPeck that such courses must be integrated within the subject areas on the degree. However it refutes his idea that it is meaningless to teach a general thinking skills course. We saw for example that positive gains emerged from this introductory course in section 8.4.2 above.

Secondly, this course was taught to students for the B.Sc. Psychology in the Community degree. I recall that it was easier to teach the course because of my knowledge of psychology. I was therefore able to provide examples to students wherein they could examine how they learn in their first year studies. This supports the fact that critical thinking courses can be taught on different degrees.



Thirdly, the purpose of the course could be made clearer through two activities: by pitching the course at a more elemental level for students; and by procuring department wide support for its integration into the curriculum. If the *Process of Learning* were to be improved it should be linked with media and while in first year it could provide a basis for improved learning in second and third year.

Clearly there are substantial benefits to involving students in reflecting upon their experiences of learning in first year. However if courses similar to the *Process of Learning* are to be integrated into the curriculum they must be sensitive and responsive to some crucial factors. Their purpose must be made as clear as possible. Their content should not be overwhelming for first year students as it will be for many a first experience of reflecting upon learning. The teacher must be aware that students may resent a course if they feel that it coerces them into changing an approach to learning that they feel comfortable with, or if they feel that it uses up time that could be better spent on course subjects. It is also important to respond to students who came to study with a view to achieving a qualification and did not contemplate reflecting upon how they achieve that goal. Overall the student must be assured that the course is relevant and fully integrated into their curriculum studies.

The benefits emerging from this course support those who say that it can be done and refutes the position which states that such courses are meaningless (a syntax only). However, it does recognise that such a course does become more of a syntax only, if it does not use examples from within the epistemology of the subjects studied, a key point made by McPeck (1990). It also becomes more of a syntax if consequently the purpose is unclear and the course does not receive cross faculty support.

I respond to this debate further in the next chapter (9), where I analyse assignments conducted by students studying the *Process of Learning*.

## 9. The *Process of Learning* Assignment

### 9.1 Introduction<sup>57</sup>

The assignment<sup>58</sup> for students was a major part of the *Process of Learning* course. Upon completion of the four Sessions students were formally required to complete the *Process of Learning* assignment as part of their requirement to pass the Human Resource Management (HRM) module. The assignment represented 50% of the marks allocated to the HRM module. In the assignment students were requested to:

Write an individually researched report of up to 3000 words. In the main part of the assignment (2500 words) discuss and contrast your experiences/observations of Information and learning activities across the first year Design and Media Management curriculum and tie these experiences in with theory. Then discuss the implications of the main part (up to 500 words), i.e. having described and evaluated your experiences with the relevant theory, you can then suggest how understanding of the course epistemic<sup>59</sup> structures as well as the learning activities could be improved<sup>60</sup>.

The purpose of the assignment (see Appendix VII) was to focus student's attention upon the *Process of Learning* and to take part in the course learning activities in earnest. In other words had it not been assessed it is very likely that very few students would have attended the four sessions.

The second reason for carrying out the assignment was to further evaluate the effects of the *Process of Learning* on student learning. In this chapter, eight of the assignments are described and then analysed with this purpose in mind. The assignments range in marks from pass to first class grade and correspond to the eight interviewees in the previous chapter. The assignments were graded both by myself and Dr David Grant<sup>61</sup> separately and then a common mark or grade was agreed for each student assignment. The assignments were graded according to the advice given to students in the assignment outline (Appendix VII).

In section 9.2 following, each assignment is summarised individually first. Then based upon this assessment, the *Process of Learning* is analysed under topics emerging from this

---

<sup>57</sup> Analysis of Assignments on the Process of Learning for the 8 interviewees in chapter previous.

<sup>58</sup> May, 1993

<sup>59</sup> For example primary and secondary sources of knowledge, how models are constructed, the issue of expertise...

<sup>60</sup> See Appendix VII

<sup>61</sup> Dr Grant has approximately twenty years experience of teaching and is head of the Design and Media Management faculty



analysis. Written extracts from the assignments are included as indented quotes. Section 9.3 contributes in part to the conclusions that I have drawn in chapter 10. I build upon the insights drawn in chapters 7 and 8. This chapter further acknowledges the importance of the learning environment in influencing learning outcomes for students as discussed in chapter 6.

## **9.2 Overview and Commentary on the Process of Learning Assignments**

### **9.2.1 Nicola Markham: 55 %<sup>62</sup>, Conception of Learning: 3**

Nicola's introduction briefly describes the elements that constitute the course and the associated learning activities. In the report she aims to reflect 'on the information I have received from the learning activities'. Her motivation for studying Design and Media Management came from the desire to study the variety of subjects that the degree offered. Her preference is for discursive subjects over factual and she did not expect to have to study so many core, factually based subjects. Yet this variety is also appealing to Nicola in that 'the different styles of teaching, the different learning experiences help the individual student to discover their personal learning strengths and weaknesses', something she discovered through the construction of the Kelly personal constructs grid and consequent reflection. She makes a comparison between photography and accountancy based upon her first year experiences using the Kelly grid. She found common ground between them.

She then discusses models as a method for constructing new concepts and refers to theoretical work here. She shows awareness of the special language used in constructing models. She then examines HRM and design in terms of experiences of teaching. She describes them as lecture based with the students 'not active' resulting in the students 'switching off.' While some students may like a didactic approach to learning she finds this 'a good way to learn but only up to a certain point then I start to concentrate less'. In referring to the assignments there, she says:

... was a lot of reading and researching involved which was quite time consuming and complicated. But the more of these types of assignments I completed the easier it became to refer to the main points only and to disregard the irrelevant information for the essay.

This suggests a development of the critical element of learning for the student. In group work she describes the difficulty in reaching agreement with other students as opposed to having all the responsibility when doing individual work. The lack of compromise

---

<sup>62</sup> Score on Assignment

amongst group members, and the need to consult on each issue she perceived to be time consuming. She prioritised the freedom to explore, using an assignment that had to be done in design as an example of this.

I think it is a good thing to improve the amount the individual knows about themselves. I think this element keeps all the students interested because everybody likes to learn about themselves.

She sees Design as opposed to HRM to be a 'different type of learning experience' being 'all creatively based'. Assessment in design made her aware of personal responsibility for learning and brought with it enthusiasm:

The assignments were individually based so all the responsibility rested with me. This can be quite daunting when the individual is not clear about what is expected. But the experimental element and individual interpretation was exciting.

Lectures were seen as being tutorial based involving discussion and interpretation.' While critiques of her work were initially quite stressful she felt her confidence improved with practice and feedback. She describes the importance of freedom to explore in learning:

... what I learnt from teaching methods in design, was that I can and should try anything that I find interesting without worrying whether I'm good at it or not.

Nicola next discusses theory and the learning process, with emphasis on Kelly's personal theory and its corollaries. Concluding, she argues that teachers can construct and 'are capable of doing research into their own teaching experiences, just as students can research into their learning processes.' She mentions the importance of reflection and suggests how 'the skills of learning learnt at college' can be applied to a new job. She suggests that the learning process is a 'complex one with a variety of ways of approaching it' and says that it can be used in every day life without elaborating upon the nature of this learning process - 'the learning process continues each day and reflection is the best way to appreciate it.'

### 9.2.2 Commentary

Through reflecting upon her learning experiences, Nicola achieved personal insight into how she experiences learning. Nicola is motivated intrinsically by the variety of subjects on Design and Media Management. The distinction is made by her between subjects on Design and Media Management being discursive or factual with a preference for the former. This awareness began through the exercise with the Kelly construct grid exercise. Furthermore, by comparing two of the modules (Human Resource Design and Design) in



terms of teaching she points out how students are passive in a lecture based format, leading to students paying less attention.

Critical thinking in the assignments improved with practice she believes. Following a short analysis of group work, she reflects upon her experience of project work on Design which gave her the freedom to explore the subject. The importance of the student being active, questioning and having the freedom to explore are the most important factors for Nicola in developing the students understanding and self awareness.

In referring to Design, responsibility and enthusiasm are linked together. Lectures here were perceived as informal involving discussion and interpretation. Here the student recognises that such a subject is not cast in terms of right and wrong responses. Confidence in learning is linked with practice and feedback and the freedom to get things wrong. Through reflection she feels one can apply skills to a new job. She recognises that the learning process is a complex one.

Nicola has become aware of important perceptions that she has concerning learning activities and knowledge on the course. Subject knowledge can be seen as discursive or factual with discursive elements linked to interpretation. Linked with this is developing confidence and enthusiasm by the student. Self awareness develops through being encouraged to question concepts and issues in a subject. She recognises finally that the learning process is complex, but made more accessible through reflection.

These insights into the students' perception is useful not only to the student but also to staff. The student becomes aware of his/her personal relation to and perception of knowledge and involvement in course modules and consequently how learning can be enhanced by more effective teaching method. Such awareness can also motivate staff to reflect upon their own teaching methods by paying attention to individual students needs.

### **9.2.3 Lori Cooper: 76 %, Conception of Learning: 5**

Confidence and initiative are clear in Lori's introductory statement:

Establishing preferential learning criteria can be seen as an essential component of meaningful, and effective education. By experiencing the various approaches to teaching, learning and assessment on Design and Media Management, I am able to establish which processes I favour and am proficient in, as well as in which subjects these are more evident. This is a significant element in determining which subjects to carry forward into the second and third years as well as setting a precedent for the way in which I should approach learning in the future. I have included in this

report a copy of the survey I carried out amongst other first year Design and Media Management students as well as some of their comments and suggestions.

The first issues she explores are learning activities. Argumentation is clearly understood by Lori to relate to:

... the importance of students' ability to question information they read, hear and learn, not simply absorbing data and accepting it as it stands. This vital component of the learning process encourages students to assert their own intellect and to research further into the given topic of information.

Lori argues that 'it is necessary to remind students of the dangers of being easily led, in order that they develop their own methods of argument.' She appraises HRM which by its very nature 'insists on students' analysis of arguments.' Conflicting theories and questioning of theories are interpreted by the student as part of the HRM learning process.

Referring to the work of Heron on 'Assessment Revisited' Lori reflects upon its soundness in comparison with her experience of assessment on Design and Media Management. The argument shows a significant degree of sophistication and confidence in comparing theory with her own learning experiences:

Although he (Heron) lays his ideas out in a most constructive and cogent manner, considering types of information processes and arguments for and against, the theory as a whole is more idealistic than realistic. It has weak points - such as not allowing for individual personalities who may not want to have such an equal share of responsibility for his/her own evaluation. From my survey I ascertained that the majority of students coming straight from school are interested in furthering their education with as little responsibility as possible and as much freedom too. The traditional roles of student and teacher are still very much respected and the evaluation of student capabilities by teachers is relied upon to be of sound quality and superiority.

Lori provides a mature perception of the hierarchical 'institutional' structure:

By conventional standards the assessors of students' work are those near the top of the hierarchical system in the institution and if this vital element of trust in their competence to mark fair work is lacking then the trust in the lecturer's own expertise may be diminished.

Lori describes difficulties with assessment by in certain subjects thereby providing useful feedback to staff:

This subject's guidelines are somewhat ambiguous and open ended in that there is allowance for



individual interpretation of practical briefs and no set 'right answer', only the diagnosis of the marker.

Freedom of expression, constructive criticism and feedback are important elements of assessment for Lori, showing a heightened awareness and an ability to pinpoint problems on the course. She makes suggestions for improving assessment:

It could be perceived that teaching staff who have had some non-educational work in their doctrines are less conformist and authoritarian by permitting students more flexibility in terms of assessment. For example, photography, giving students free reign to set their own objectives and submitting work at their own discretion. A broader outlook with less fixed ideas and opinions due to a genuine involvement with their subject promotes this kind of attitude.

Lori very confidently expresses her views further on the issue of democracy as being intrinsic to assessment on Design and Media Management. She also critically evaluates literature dealing with assessment in great detail. However she feels that there are problems with feedback on the course. By relating her learning experiences and survey work to the literature on the subject one can see the benefits of engaging the students in the *Process of Learning*:

Relating to the Heron theory, most Design and Media Management students when asked if they would like to be considered for involvement with their own assessment, replied that they would like to have more information on how it is carried out, and even be allowed to make suggestions of methods, but when it came to the final mark, they prefer to leave this decision to 'the experts'. In my opinion, while Heron's conclusion to the assessment argument is agreeable in some cases, his premises are not all acceptable.

Information issues are then explored showing further potential for involving students in the process of learning. Explanations of theories she says had not been deemed necessary for teaching on Design and Media Management:

In order for a student to determine the accuracy or relevance of a theory he/she needs to question and challenge explanations by comparing two or more theories, and in so doing, their reasoning, strength of evidence, weaknesses or omissions, as well as their adaptability to new or different circumstances and information.

In conclusion, she outlines her main arguments. Flexible assignments and creative leanings are appreciated by students as examples of learning satisfaction:

It can be seen that teaching and learning methods do not necessarily contribute to a students like or

dislike of a subject but that they are relevant to their enjoyment of and probably their performance in a subject.

Lori's confidence is further demonstrated in appraising assessment in a particular subject. She lists lack of objectiveness and accuracy as well as poorly assessed group work in particular areas of the curriculum. Lori's survey found that authoritarian assessment was most favoured by students but with a urgent need for more guidance on how to carry out assignments.

She recommends that a 'critical analysis should be given in every subject after each term in which feedback can be given on students' work. This could be carried out in groups or individually, with lecturers.' Feedback is crucial she argues, pinpointing a number of areas on the curriculum where it can be used constructively in improving learning for the student such as gearing lectures towards how to conduct assignments:

It is necessary that we realise why we are given the marks that we are, and how we went wrong and right, and what we could do to improve our skills, knowledge, and learning capabilities.

#### 9.2.4 Commentary

The report written by Lori illustrates the potential of involving students in reflecting critically upon their learning experiences. The assignment begins with clear indications of confidence and initiative shown by the student. Beginning with argumentation Lori demonstrates a sophisticated awareness of the student and his/her relation to knowledge. She distinguishes between the importance of students questioning a subject as opposed to simply accepting it. Argumentation she believes needs to be developed by the student. She then relates this to what occurs within subjects on first year Design and Media Management, that encourage questioning and analysing.

The ability to critique theoretical work on assessment contrasted with experiences on the first year course demonstrate Lori's confidence in critique. This is further reflected in her awareness of the educational hierarchy and how assessment is placed in the hands of those at the top of the system. She attributes importance to having trust in the assessor with constructive feedback reflecting her critical awareness of what constitutes good assessment. Overall she has critically reflected upon assessment based upon Design and Media Management experiences, theory and survey work presenting an awareness that demands response from staff interested in improving pedagogy. Confidence, trust in the lecturer, feedback, democracy are important considerations for the lecturer in developing assessment she states.



She distinguishes subject epistemology as either factual or ambiguous in nature on the Design and Media Management course. Lori articulates very clearly in her essay and appraisal of theory the constituents of satisfactory learning based upon her experiences of Design and Media Management year one. She perceives knowledge in terms of factual versus questioning, ambiguous subjects. Through her critique and with staff cooperation students can develop their ability in questioning subjects through assessment. Thus, Lori's assignment provides feedback to teachers interested in improving teaching methods.

#### **9.2.5 Jackie Morgan: 65 %, Conception of Learning: 4**

For Jackie, as a mature student, returning to study to 'increase my knowledge and acquire new skills has not been an easy process'. She begins by describing the Design and Media Management subjects very briefly and distinguishes between them in terms of learning activities:

In subjects such as design, sound and photography we are required to apply practical, creative and technical skills. In subjects such as economics, accounts and statistics we are required to use models, formulas and numerical skills. In marketing and human resource management we are required to apply various theories.

She has found it difficult dealing with terminology on courses such as economics and accountancy. She has,

... experienced difficulties remembering the meaning of these and other similar new terms. The language which is used whether written or spoken has effected my ability to understand the theory.

Examining information, she describes the different sources of information:

My understanding and interpretation of any information will be based on personal experiences and my educational and cultural background. This is why on some occasions my interpretation was not the one intended by my teacher.

Drawing on critical thinking literature she indicates a mature understanding of what constitutes a more effective learning experience:

When we analyse information rather than absorb it we may be able to develop concepts of our own or at least discover the assumption and biases underlying the information given and hence our own interpretation of it.

By reflecting upon HRM in relation to literature, Jackie indicates a critical understanding of the nature of expertise:

In text books, the authors' interpretation are often passed off as objective facts when the author is basically stating the facts as *they* see it.

Using literature on critical thinking, she further develops her reflection upon the process of learning. She reveals a strong awareness of the multiplicity of views:

Underlying these theories are certain assumptions, and these abstract assumptions often conflict with our own concrete experiences. In HRM we have been presented with several theories which seek to explain our behaviour pattern and way of thinking. Underlying any theory is a set of assumptions which are usually implied rather than clearly asserted. It is not easy to uncover the assumptions underlying certain theories.

She then evaluates expertise where she proposes that:

In our expert dominated society we are neither taught nor encouraged to question the authority of experts. We allow them to influence our thinking and control our lives. However a number of experts have misguided us in the past and the term expert has become over-used as individuals in our society have tried to gain superiority or unquestioned authority.

The qualities of understanding and patience are felt necessary for Jackie from teachers to help her understand the 'mass of new information that I am presented with.' At times she experiences difficulties in understanding new concepts:

When I have tried to make sense of new information I have been forced to re-examine the various concepts that I already hold.

She emphasises the importance of reflecting upon her experiences and moving towards critical thinking. She then explores working in groups, beginning with a description of the advantages of group work, for example in being able to share resources. The purpose of group work she feels to help other students out as well, though in practice she says there may be problems with this, which she explains through literary reference:

If we share our knowledge with others this can lead to more positive learning outcomes. Vedder, 1985 suggests that to be effective help must satisfy these five necessary conditions. The help must be (1) timely, (2) relevant, (3) sufficiently elaborated, (4) understood by the recipient and (5) applied to solve the problem.



Jackie feels inhibited seeking help from group members at times as she does not wish to look foolish. Understanding and the learning process for Jackie are improved through helping other students and by being able to relate her own personal experiences and knowledge to the relevant subject matter:

The process of me understanding the various information that I obtained was not an easy one but eventually it all made sense. Soon I was able to understand the terms.

Helping other students may include teaching something to another student. She supports this with evidence from a particular study.

She then examines assessment types. In a brief critique she criticises teachers that assess the student for the end product of their work as,

... this has a major drawback in that the teacher has little evidence of the process of thinking and learning employed by the student who produced the work.

She describes the benefits of good assessment which she says is in place on some of the modules. Feedback and knowledge that the students response (or work) is correct can produce satisfaction and a sense of achievement for the student. In conclusion she says that learning is chiefly influenced by time and by group versus individual work. Supported by theory she argues for teachers to be considerate in the tasks that they set and the methods that they use to appraise them. Also she feels that too much of the learning process is controlled by teachers, with not enough student led initiatives:

Our teachers decide what we learn, how we learn it and how our learning is assessed. Our authoritarian educational system also generates the wrong sort of motivation in students.

She recommends that teachers develop a democratic educational system, where students are able to participate in decision making processes. Students should be involved she argues in decisions concerning their learning objectives and outcomes. She recommends emphasis upon the process of learning:

When I set my own learning objectives then I can devise a learning programme which will require me to perform certain task. I will then be able to assess my objectives and the way in which I performed them. When I then assess the content of what I have learnt I can also assess how I learnt it. Therefore more weight should be given to the process of learning rather than concentrating on the content of what has been learnt.

### 9.2.6 Commentary

In her assignment Jackie discusses several learning activities in her first year on Design and Media Management. She describes them in terms of their relation to the quality of her learning. Her awareness demonstrates a sophisticated perception of how learning experiences can be enhanced or inhibited by the approach of the students and teacher in the classroom.

Firstly, she experiences difficulty in making the transition to college as a mature student. Secondly, she distinguishes the subjects in terms of their salient features. Her critique of expertise argues that a critical approach is superior to memorisation of information in terms of learning. Thirdly, she states that experts may be biased in their assumptions, supported by an authoritarian society.

She points out how difficult it is in having to deal with so much information. Group work experiences are described by Jackie in terms of criteria which promote and inhibit group activity. She believes that assessment should look not only at the product but also at the process. Assessment should include feedback and encourage students to learn from mistakes thereby leading to satisfaction in learning for the student.

Jackie relates her experiences on first year Design and Media Management and theory with the quality of her learning. She makes important points that have implications for pedagogy. It is important for staff to acknowledge the cultural background of the student as this influences his/her learning. Learning and understanding are defined by her in terms of relating personal experience and previous knowledge to present subject matter. In practical terms this learning can be enhanced through having adequate time to complete tasks and by giving more control to the students. She concludes by arguing for a shift from educational product to encouraging students to reflect on the process, to reflect upon how they achieved their educational goals.

### 9.2.7 Vasilis Hadjivasiliou: 40 %, Conception of Learning: 3

Vas introduces Design and Media Management year one by very briefly describing the aims of the course, stating that it is a diverse course. He then provides a sketch of the modules offered. It reads more like a prospectus guideline with little personal experience included. Assessment and group work are described very briefly. Vasilis examines group work by describing its advantages, such as, being able to rely upon each other and being able to generate more ideas. Upon reflection he suggests that learning within a group can be more wide ranging,



Interaction and the exchange of experiences between the members can give new powerful insights regarding the learning itself and the task. Experience in group work can also prepare students for future professionally structured work environments.

He then lists some of the disadvantages of group work indicating reflection upon first year experiences:

During the first year groups were very competitive. I believe this was unnecessary since all groups have or should have the same goal: to complete the assignments and finally complete the course successfully.

Individual work is then appraised first with a description of the advantages and disadvantages of individual work. Very briefly, he describes his feelings regarding assessment, proceeding to a brief account of other elements of the course such as portfolio work. He describes expertise in relation to the course, the student basing interpretation upon experiences in first year Design and Media Management. He concludes that 'more or less all modules in the Design and Media Management course require the student to discover the truth himself by putting him in a situation that he has to produce certain results either by means of research (primary or secondary) or by experimenting'.

In conclusion he feels that the course is management oriented and not design/creative oriented and that subjects such as design are not covered in enough depth. Design and Media Management he believes, prepares the student to 'be good managers, work in groups and learn from each others experiences or put themselves in different situations (assignments) and manage to attain certain goals.'

### **9.2.8 Commentary**

Overall the assignment is too brief in its handling of the issues, lacks evidence of reading and does not critically reflect upon these issues. He does not explore the implications of his findings.

### **9.2.9 Donna Bradshaw: 65 %, Conception of Learning: 3**

Donna describes the initial euphoria of being accepted for Design and Media Management followed by the realisation that 'it is necessary to slot into a programme of learning activities.' She experiences having to decide whether to stay with the course or to decide

that it was not for her and leave. She intends in the report to outline some of the learning experiences from the course that she had.

She then discusses assessment. Her first experience was a feeling of being thrown in at the deep end. She then analyses further this experience of being anxious with her new surroundings and the immediate group work assessment (video presentation) on the 'Design and Media Management Beer Project.' In the brief they had to make a video presentation. Soon she became aware that 'students came from either a business background, a media background or an art background.' In the exercise that followed resistance to trying out unfamiliar activities and a feeling of anxiety pervade - 'The major difficulty that I found was that I had to do things that I did not want to. Other people coped with this experience much better than I did but I really did have to think 'What on earth am I doing here?' She realised that the exercise was intended to be an icebreaker upon reflection:

In certain situations some people are more confident than others. However, I find that on a personal level I take a little more time to 'warm up' but I too can become an organiser or leader.

Through reference to researched material, she evaluates her feelings quite impressively acknowledging that there can be a diversity of views amongst group members, that positively can input greater ideas and ultimately acceptance of a consensual opinion. Disadvantages of her group work experience early on in Design and Media Management year one are related to theory, such as the 'pressures to conform and domination by the few'.

Portfolio work is then appraised in relation to the Design and Media Management course. She experienced many difficulties in putting her portfolio together. In Design, for example, she found it hard to interpret or relate to the exercises when they introduced a 'totally new concept of ideas.' She describes examples of these from Design such as in doing the weekly critiques. It was difficult for this student to embrace new initiatives:

Although this may seem an ideal way to examine work for this subject, I found the experience very embarrassing at times. Due to studying certain subjects at A level, my mind has become accustomed to thinking in a particular way. I often created barriers to the subject that did not have to exist.

Relating her experiences to literature she discovers that her motivation to learn on Design was extrinsic. For example, she is motivated to learn in order to meet deadlines for assignments. She has become aware that enjoyment of a subject and high grades in assignments do not necessarily go hand in hand.



Client presentations are next explored by Donna with reference to assessment. She first describes the dynamics of the client brief, giving examples such as the 'City Bag Store' project. Group difficulties emerged during this project, for which she suggests improvements can be made following reflection, and here she ties it in with literary reference:

I feel that one major problem was that as a group we did not actually discuss how to approach a decision making task.

This she does very effectively and considerately here. Adapting to new curricular demands is proving difficult for her:

I feel I am losing my ability of tackling examinations. During my A levels I practised the art of answering essay questions so much so that I felt confident when I walked into an examination room. Now I fear that I am losing that confidence.

She next reflects upon teaching methods, beginning with an explanation of the teaching on the Sound module using Kelly's Personal Construct Theory. She suggests a need for change. Asking students in year one to list their experiences of teaching methods may help improve the first year experience she says:

I realise that there are obvious time constraints but in order for the subject to be more effective, the teaching methods have to be investigated more closely.

In conclusion, she first discovers that her 'personal difficulties' on the course have been related to group work. Referring to the work of an educator she agrees with views that perceive education as involving a shift away from formal guidance towards independence in learning:

In universities in general, there is a shift from being spoon-fed as in GCSE qualifications and A levels, to the realities of having to organise your own learning activities.

Her subsequent comments indicate an awareness of responsibility of the student in the learning process. Giving examples she finishes by stating that she is enjoying the degree.

Despite the vast criticism of the Design and Media Management degree, I am finally realising how the course will benefit me once I have graduated.

## **9.2.10 Commentary**

Donna's report provides very useful insight into how previous educational experiences can inhibit present approaches to learning. This is illuminated through her account of group work and assessment on first year Design and Media Management.

On being accepted for Design and Media Management she experienced a crisis early on in the first semester group assessment. Her experience of anxiety and an unwillingness to get involved in the video presentation stemmed from a resistance to trying out new activities. Through reflection and reference to researched material she attributes this inhibition to previous learning at A level where portfolio work and other Design and Media Management learning activities were not on the curriculum. She has also become more aware of the diversity of views amongst students. She distinguishes between intrinsic and extrinsic motivated learning and concludes that satisfaction in learning of a subject is not tied in with achieving high grades.

These insights are very important both for Donna and for teaching staff. Both become more critical of the goals of learning and of their respective responsibilities. First year Design and Media Management has created many new experiences for Donna whereby she must adapt to the changing role she faces in her learning. She must recognise that she has more responsibility for her own learning and that there are a range of views or opinions on topics that may not be similar to hers which she acknowledges. Her confidence can only improve if she adapts to the changing learning environment.

In the second half of her report she indicates a willingness to change by making positive suggestions for course pedagogy. For example, she reflects upon how teaching methods could be improved on certain course subjects, and how with the live client brief project the group could have been more effective. In concluding, she makes an important insight that many of her personal difficulties have been related to involvement in group work. Finally she indicates a willingness to shift from previous learning experiences where she was passive towards being responsible and independent in learning, which is more reflective of the Design and Media Management rationale.

## **9.2.11 Carol Rogerson: 53 %, Conception of Learning: 3**

Carol aims in her report to examine the first year of the Design and Media Management degree in relation to her own experiences and expectations. She asks questions - has the course in reality met the prospectus aims, how do we learn on Design and Media Management, how well do these learning processes work in practice? The structure of



**Design and Media Management allows for experimentation, a varied curriculum and assessment patterns according to Carol. Personal student responsibility for what one gets out of the degree should be encouraged she feels as part of the pedagogy on Design and Media Management:**

**The usual model for education is that of the lecturer as an authoritarian figure. It is he/she who designs the programmes of learning, who determines the criteria of assessment and makes the assessment. The shift to self direction and self assessment begins to make the processes of learning more important than the content of what is actually learned. In the Design and Media Management degree, students are made aware of how they are learning and that they must be self motivated in order to attain the maximum possible from the course.**

**She then proceeds to examine the experiences of students during the first year. Looking first at student and then at staff motivations, she describes Design and Media Management as an experimental course, where staff must be seen to fully embrace the course rationale:**

**It must have the full support of the people who run it - where enthusiasm rubs off onto students, so does apathy.**

**As a mature student she is anxious about the type of future career that will be open to her:**

**I am concerned about the skills that we will be able to gather and thus the type of job that we will be qualified for. For many of us who have already experienced a year or more of work, there is more to acting professionally than this.**

**Examining teaching methods she notes the diversity of methods. Commenting on the experimental hands-on approach for teaching practical subjects she argues for the inclusion of more theory in such an approach. Using examples such as photography and sound, she discusses how simple changes can include more theory. Another example of innovative teaching is welcomed by the student which involves the student in forming his/her own opinion:**

**In IIRM, Design and Sound we have the benefit of more than one lecturer. This provides an alternative viewpoint in class discussion and improves our understanding as we are more easily able to form our own opinion and are not led by just one person. An objective view can only be achieved by looking at a situation from all angles. If we have one lecturer, then he/she is seen as the expert and any information found elsewhere is likely to be already viewed subjectively.**

**Carol examines the concept of expertise and raises important pedagogical questions at the same time. She asks why certain people are seen as experts, how we can decide who is**

'right', and whether 'we' are merely placating the lecturer with what s/he wants to see, are examples of the questions that she raises. Further questions are raised concerning the dynamics of teaching. Carol seeks to understand why students do not ask questions when given the opportunity and also why the material being taught does not always seem relevant to the study of design or media. She feels that there is a lack of integration across the design, media and management disciplines with most emphasis in first year upon management studies:

We are being pushed and pulled in a variety of directions instead of being encouraged to go in the direction that we choose.

She suggests improving understanding of students' individually through one to one contact with teachers:

The teacher gets to know something of the students and their preferences and this discovery goes both ways. In future group lectures and in future individual sessions, this new information can be expanded and used to good effect. It may also help the teacher to understand the student's work during the semester and when assessing it. Communication can be made more effective if teachers as well as students are aware of the processes in learning and students are aware of their teachers' teaching methods.

Feedback is an essential part of improved learning. She argues that students need to know that their work has been 'thoroughly reviewed and fairly marked.' Tutorials should be made compulsory in order to 'reduce the stigma that many people feel in showing anything more than the lowest necessary amount of interest for the course.' Improved understanding can come from being able to seek help regarding their work or feelings. The importance of being able to listen to the student and his/her needs is borne out by the following quote:

Students sometimes ask for help. They may not, however, ask for help because it is needed or for the right kind of help. Some students ask for help to get attention, others are seeking confirmation that their work is correct. There are students who will not give any indication that they need assistance and do not receive any.

Less forward students find it difficult on Design and Media Management to solve problems as 'help from lecturers is not readily available.' She proposes more tutorials, group work and improved feedback here.

In the next section starting with group and individual work, the Design and Media Management 'whole course concept' is evaluated on the course in relation to the 'outside world.' She finds (based upon her work experience) group work to be less formal at college



than in the work place with less achieved in terms of objectives but more achieved in terms of making friends:

I believe that there are less advantages in group work for students than there are for employees.

There are, however, significant advantages for both which could never serve to make the concept of group work in college redundant.

The individualism in society permeates into the classroom she argues, leading to lack of commitment by individuals to the group process. Relating her experiences of class group work to the work place Carol raises many interesting points and questions. For examples she perceives class work as practice for the workplace where it will occur frequently.

Assessment styles are next explored. Portfolio work on Design and Media Management provides an unique experience for the student. She feels that it is more relevant than examinations for assessing a students' ability as it more closely mirrors that which occurs in the work place:

In the world of work we will not be subjected to formal exams. We will be judged on attitude, on performance and on whether or not we can get the job done well and on time. In this way a portfolio more closely resembles this method of testing.

One example she provides is that the continual pressure of coursework enables the students to learn for themselves the concept of effective time management. Assessment in year one can be viewed she says as an opportunity to gain the important skills for years two and three.

She concludes with some recommendations. Firstly she feels that there is a lack of integration between the subjects studied on Design and Media Management, due to she reasons there 'being such a number of possible paths in years two and three.' She suggests improvement through linking subjects together - 'one business and one practical subject could be joined to form a single assignment which satisfies both subjects criteria.' Secondly she recommends that feedback tutorials be made compulsory in first year. Improvement to group work could be achieved by having other options than just self selecting groups. Finally, she does not feel the *Process of Learning* course should occur through the three year degree as she feels it misdirects students from their chosen path:

While there is a need for analysis of learning methods and for criticism of current methods used in the context of an exploratory and experimental course, a short period of this type of study is adequate for Design and Media Management students.

## 9.2.12 Commentary

Carol describes her experiences of learning on first year Design and Media Management and provides rich insights into a wide range of issues. Teaching methods, assessment, interaction with knowledge, group work, staff responsibilities in and students experiences in learning are covered.

She begins by asking whether Design and Media Management attained the learning objectives outlined in the prospectus. For Carol, students must be encouraged to become self directed and self assessed and thereby move away from the norm of perceiving the lecturer as an authority figure. She recognises the importance of motivation for the student if s/he is to be successful on the degree course. She does not feel that the course prospectus is being realised in first year and this is reflected as a concern, since she has high expectations of the course having both previously worked in business and as a mature student thinking in terms of her future career.

In discussing teaching methods she argues that there is a need for more theory coupled with practical work on subjects such as photography. She provides an example of innovation in one subject where more than one lecturer takes the class thereby providing alternative viewpoints or interpretations. She feels that this leads to greater objectivity than if the class was taken by one lecturer. A need for improved communication between teacher and student is reflected in her discussion of expertise where she argues that students may simply present written material they feel placates the lecturer. The importance of feedback is mentioned, of listening to students and recognising that less assertive students will find it more difficult on Design and Media Management dealing with the responsibility placed upon them.

The influence of society is pointed out as influencing learning where she feels students are more individualistic and less committed to the group work. She links learning further with the workplace by describing how portfolio assessment on Design and Media Management reflects more accurately that which occurs in the workplace. In concluding she argues the need for greater integration amongst subject disciplines such as in assessment.

Carol's report describes very well her experiences on Design and Media Management from the perspective of a mature student who has worked professionally before commencing her studies. Her expectations of Design and Media Management are measured in terms of her experiences previously in the workplace. In certain areas such as assessment she feels it reflects the workplace very well. Her maturity is essential in understanding and coping with the responsibilities in learning which she feels are reflected in the course rationale. Suggestions are made for improving the course which seem to reflect her experiences



before college. Such qualities and insights appear to assist the student enrolling on the course, whereas a more passive student may find it difficult coping with first year responsibilities. However by not referring to literature on any of the topics discussed her arguments were somewhat undermined in terms of the *Process of Learning* assignment.

#### **9.2.13 Jayne Ralph: 55 %, Conception of Learning: 3**

Jayne begins by examining the background of the course. She notes the diversity of students enrolling on Design and Media Management coming from many different countries and backgrounds. She notes the types of assessment and the semesterisation of the course where 'students are encouraged to learn for themselves, from within, from others and through personal research.'

Jayne next examines assessment in some detail in which for her there,

..isn't usually a right or wrong way to tackle an assignment as long as it is understood by the student what the aim is. This is especially true of design where self interpretation of briefs is encouraged.

There is no correct or incorrect style of answering briefs, as long as there is justification.

She lists the types of assessment on Design and Media Management as portfolios, essays, reports and presentations. Portfolio work is well suited to the creative areas of the course she feels, namely sound, photography and design:

Exams would be a pointless exercise in these subjects as it is the practical evidence takes preference over the theory.

The use of essays in Design and Media Management subjects is described but without an interpretative element. The benefits as she sees of doing reports are then described. Presentations test 'the ability of students professional abilities when dealing with live clients.' She argues that dynamic assessment is needed for the Design and Media Management course as preferred to examinations because of its practically based nature.

Jayne next explores teaching methods on Design and Media Management. Importantly she suggests that pedagogy should be guided by the recognition that 'there is no correct or incorrect answer' so the lecturer 'cannot show a model answer to students, only aid their thinking strategies.' Lecturers encourage students to think for themselves she says in a number of ways. For example, in not dictating to students and in class activities that give the student the freedom to explore tasks with fellow students.

Learning is perceived as the most important element of any degree course by Jayne, which she says is taught in non conventional ways on the course. The shift from didactic teaching is clear from Jayne's comments:

The last thing students endure is the situation of taking dictation then learning it perfectly to be tested on that information later. Students are encouraged to learn for themselves on Design and Media Management in many different ways.

Jayne describes these activities as taking part in activities and experiments such as in IIRM and in participating in group work:

This gives students opportunities to interact with other group members. Students learn how to take others views into consideration, instead of just their own and learn from other people's experiences.

She outlines other ways in which students are encouraged to learn. They include doing individual research, presentations with live clients, lecturers teaching students how to do certain tasks, and being taught how to handle constructive criticism from other students and lecturers during feedback sessions in class:

Individual research into certain subjects is very rewarding and the information learnt tends to be remembered longer. Presentations with live clients can be taught but one must practice to create ones own style.

At this stage in the report Jayne draws upon the literature to discuss assessment (referring to the work of John Heron). The issue concerns the degree to which the student is and should be involved in deciding how s/he is assessed. On Design and Media Management she feels that there is a great deal of autonomy given to the student in controlling assessment:

Within Design and Media Management the lecturers do not decide the programme of learning for each student - each student has their own programme. They do decide the basics of what subjects they learn and students have some control of assessment.

She recognises the implications of such responsibility:

Students have their own control over how much or little they learn and they have control on the level of intelligence achieved.

Further discussion of Heron's work draws upon the issue of collaborative assessment, seen as an intermediary step between traditional unilateral assessment of the student by tutors



and the type of self and peer assessment model. The point is made that this type of assessment can be introduced into an authoritarian regime quite readily. Upon reflection, Jayne sums up the assessment on Design and Media Management:

There is no criteria of assessment and it is left to the lecturers discretion. There is some sort of grading system. The idea is for students to think critically, to encourage them to start thinking about setting themselves standards of excellence by which to assess their own work.

The following conclusions are drawn by Jayne concerning her report. Firstly, she feels that students should be chosen for the course that are self motivated and able to learn for themselves. This she attributes to the uniqueness of the degree which is not suitable for students expecting conventional lectures pedagogy. She feels that assessment is designed on Design and Media Management in order to encourage students to think for themselves - 'Learning is encouraged from oneself, ones personal research, ones creative mind and other's experiences.'

Jayne points out that the work set on the course is applicable to the workplace. Knowledge and information can be applied from the course in post graduation settings she feels, examples being the giving of professional presentations, the ability to do research, a basic understanding of the economy, understanding technical equipment, working in groups, meeting deadlines. So she sees very positive links between the degree course and the workplace.

She is very positive about the course stating that it gives the student the opportunity of learning 'how to learn which is something that is overlooked by the individual.' She also makes recommendations about where the course could be improved: there should be greater communication between student and lecturer; more feedback on marked work; greater student involvement in assessment; more organised visits; in certain subjects more constructive lectures; more IT in first year; simpler terminology used in certain subjects; to inform more people and potential employees of the course.

Finally, she comments upon the process of learning course where the 'lectures were quite complicated and the purpose of the lectures was not clear. However with reference to the assessment set it is a very worthwhile exercise, once again encouraging students to learn from themselves, which is what Design and Media Management is all about.

Overall, Jayne's report reflects well upon her experiences in light of literature. She shows a healthy appreciation of the course and a healthy awareness of self knowledge and responsibilities. Throughout the report, she measure the course in light of potential employment and feels very favourably that the course prepares the student well for a future

career.

#### 9.2.14 Commentary

The most salient experience for Jayne in her first year on Design and Media Management concerns her awareness and commitment to the responsibility that the student has for his/her own learning. She mentions this several times in her report. The report also provides insight into her epistemological awareness or development.

At the beginning of her report she perceives learning on Design and Media Management in terms of personal responsibility and sharing with and learning from others. From her experiences she rejects the idea of a student passively receiving information and being tested later on that information. Instead students are encouraged to learn in many different ways on Design and Media Management. She describes assessment on the course as a good example of the above responsibility. Portfolio assessment is experienced as dynamic, creative and essential for the practical elements of the course. Students experience a degree of control on how they are assessed. This student centred approach is of far greater value than a conventional examination format which would be largely ineffective for design and media students. Her argument is balanced against written material on assessment.

Further insight is provided into her epistemological awareness. Acknowledgement of there being no right or wrong answer but rather self interpretation supported by 'justification' or evidence indicates a more sophisticated perception. This is further evidenced when she discusses teaching methods and argues that students should be and are encouraged by lecturers to think for themselves or to aid their 'thinking strategies'.

Learning she concludes involves self motivation and sharing thoughts and experiences with others; on Design and Media Management and the *Process of Learning* it also involves exploring how one learns. She cautions that this self reliance may be found wanting in students that are used only to conventional lecturing and examinations. Also important for Jayne as a mature student is the fact that the knowledge and activities on the course can be applied to the workplace such as doing presentations for example. As with previous mature students she is very keen to appraise the course in terms of preparing her for a future career. It is also important to note from her report the many suggestions for improving the course, which has pedagogical implications such as the need for more feedback on marked work and greater communication between student and staff.



### **9.2.15 Assiya Amini: 75 %, Conception of Learning: 5**

**Assiya provides a comprehensive reflection upon the process of learning as experienced on Design and Media Management. In the first year of Design and Media Management she points out, students have the opportunity to 'explore and relate ideas and make further progress, so that at the end of each activity he/she has learned something additional.' In her introduction she outlines her intention in the report to include relevant evidence of theory, the differing opinions of fellow students, the experiences of a graduate student and 'seven second year students from the Design and Media Management, whom I have interviewed in order to get some feedback and their perceptions and reflections of this course.'**

**Learning activities are first investigated by Assiya. She compares group and individual work in order to explore 'which kind of working method leads to effective learning and understanding.' Much depends on the requirements of the activities she says, but overall she argues that both approaches are 'positively related to learning and gaining experience and developing skills in different areas, which are needed for a student's future life and work.'**

**The advantages and disadvantages of individual and teamwork are next explored by Assiya. Drawing upon theory she proposes that giving explanations can improve one's own understanding:**

**Participating in group work can encourage the student and illuminate one's own understanding, or even illuminate the misconceptions they might have.**

**She provides a very good analysis of her own group work experiences on Design and Media Management year one. Her fellow students 'felt for each other's understanding and learning and we helped each other throughout the work process. This was not only because we thought in terms of being rewarded (marked) as a whole group, but we felt secure and enjoyed working together.'**

**She recognises that group work may sometimes have a negative impact upon learning and understanding the problem. She points out that problems of communication, pressures to conform, and time constraints can affect group work adversely. It is also important to have individual work she feels. She concludes this section with a description of her survey work wherein she interviewed second year students about issues such as group work.**

**Assessment and understanding is the next topic she reflects upon. Assessment on Design and Media Management she says is based chiefly on portfolio or on course work, which in terms of learning she feels is effective and makes progress. Relating Design and Media**

Management assessment to theory she contrasts portfolio with traditional examinations which require mere reproduction. With Design and Media Management assessment 'emphasis is put more on critical acumen and awareness. Students are more encouraged to practise the theory, and to be creative.' The choice is between passing or reaching understanding. On Design and Media Management she feels that the emphasis is upon the latter:

The value and complexity of the course have helped me to learn new skills and get different experiences.

This was supported by her research into second year students attitudes where,

... only two of the second year students were interested in passing the first year; five of them wanted to gain experience in different areas and learn practical skills.

This is important she feels as it is skills and not results that employers seek in graduates.

Portfolio assessment requires more feedback and guidance from staff 'with the purpose being to understand more writing concepts and to augment the results.' A major problem with portfolio work she states is being able to hand it in on time, which is supported by her survey work also. She points out the reasons for this such as procrastination or having too great a workload so that - 'there is just one hand in date for all the different subjects.' She proposes how this problem may be rectified.

A distinction is drawn by Assiya between assessment which is process oriented and content oriented - 'The student, thinking more in terms of external rewards and punishment, motivates only learning rather than getting involved and committed in the subject matter.' Here she refers to literature. Students need to move away from content orientation and be given the opportunity to take part in the assessment procedures she suggests. She concludes that the purpose of assessment is to show how the performance of the student is with regard to the content of the course.

Assiya proposes, supported by theory that the student can:

... practise sound reasoning, making independent judgements and developing standards of professional practice if given the opportunity to critically think about his/her process of learning and determine his/her own learning objectives. I think it is important to motivate and encourage students to discuss, compare and contrast their views about how they learn and how they want to be assessed on a collaborative basis with other students and their lecturers.



**Adopting a proactive stance, Assiya reflects upon first year assessment which she feels was fairly and accurately assessed:**

**Students however should be informed more about grading criteria used by staff in their assessment and where possible should be allowed negotiate these criteria which so far 'was only the case for one assessment during the whole year. Students are confronted with different subject matters in first year.**

**Assiya perceives the roles of lecturers as that of facilitators and mentors. In her interviews with second year students she reported that they experienced a lack of communication between students and lecturers, a lack of teaching equipment such as computers, and 'no encouragement by lecturers to make use of the facilities at the University.' She states that these problems remain in her first year on Design and Media Management.**

**Assiya comments upon knowledge structures:**

**In teaching the theoretical aspects of the subjects, lecturers use different methods to explain the subject matter, i.e.. demonstrative, visual and aural sources (video tapes, slides) or paradigms, theories and models.**

**She draws upon the literature in giving a description and critique of theories and models as experienced by her on the course, such as on HRM and Economics. On their own she feels they are not enough in understanding reality, that students also have to have background knowledge as well:**

**They must understand the language and jargon and figurative elements of the models and have the ability to absorb the given information and apply and evaluate them at a later stage.**

**Having reflected upon her first year course experience on Design and Media Management, Assiya recognises the complexity and interrelations among the various subjects on Design and Media Management. The wide variety of learning activities/experiences enable her to face problems and challenges in the 'real world.' Thus she feels that it can be applied to life and any subsequent occupation. She recognises the importance of exploring the implications of what she has reviewed in her report. She recommends having different hand in dates for different subjects; for students to have more contact and feedback with the lecturers; improved staff justification and explanation of why an assignment is awarded a good grade; for students to get the opportunity to discuss their process of learning with the staff and could have a word in determining their own learning objectives, to motivate the student's critical thinking in group discussions; that students be encouraged to use the University facilities more. In conclusion she states:**

These changes do not require much but could benefit to the process of learning and achieve much better results.

Overall this report was very constructive and positive in reflecting upon the process of learning.

#### 9.2.16 Commentary

The report by Assiya demonstrates very effectively the benefits of involving students in reflecting upon their learning experiences at college - in her report she critically examines her experiences of learning activities, provides insight into her epistemological awareness, demonstrates initiative by conducting a survey with second year students, weaves relevant literature into her report to provide balance with her own subjective experiences and finally offers suggestions for improving the curriculum which can benefit staff and students.

A central theme running through her conception of learning is that it involves relating ideas with each other, with personal experience leading to understanding and in developing skills that can be personally meaningful and applied to future work. This theme permeates Design and Media Management learning activities she feels. For example, she analyses individual and group work on Design and Media Management in listing both their positive and negative effects upon learning such as highlighting misconcepts that one might have through listening to others in the group. Further to this she balances her experiences against literature and survey work that she herself conducted.

Assessment is explored by Assiya in detail. She contrasts the effects of portfolio and traditional examinations work upon learning. Developing skills, applying knowledge, being creative and developing ones critical faculty, understanding and awareness are associated with the former mode of assessment while reproduction and grades attainment are associated with the latter. Students in her survey also placed greater emphasis upon the former qualities. Assessment she feels should involve the student being intrinsically motivated with the ideas and concepts rather than be motivated externally in terms of rewards and/or punishment. Personal commitment is crucial in learning for her. This indicates her awareness of a dichotomy in learning influenced by the type of assessment the students engage in.

The epistemological implications are also understood by her- namely whether the goal of learning is to attain personal understanding or external material rewards namely grades. She accepts knowledge and concepts as not cast in stone (that is in terms of right or wrong)



but rather as needing to be discussed, reasoned through in a sound manner with independent judgements formed. This critical faculty is comprised of skills which she feels can only be developed through opportunities provided in the curricular activities. Students should be further involved she feels in decisions concerning their learning activities such as in assessment where she makes proposals for improvement.

In further examining teaching methods and knowledge learning is described by her as involving both knowledge and experience of its use. Difficulties occur with language that is jargon in type. Her survey work further indicated that many of the concerns of second year students prevail in her year. Her she makes suggestions for improvement. For example she argues the case for greater feedback from staff, for students and staff to discuss the students' process of learning, and for activities that encourage critical thinking in the student amongst others.

### **9.3 *Discussion of the Process of Learning Assignment***

All students participating in the *Process of Learning* were obliged to complete the *Process of Learning* Report. In section 9.2, I have described and commented upon eight of these reports individually. They reflect a range of grades from 'Pass' to 'First Class' response, with conceptions of learning between 3 and 5. The aim of the report was to enable students to reflect critically upon their first year learning experiences in terms of learning activities that they took part in as well as how they perceived and related to knowledge (epistemology). The report required the student to provide a first time commentary or reflection on his or her experiences balanced against a little relevant theory and then for him/her to discuss the implications of what s/he had discovered.

The commentaries above and the collective analysis to follow clearly show potential in encouraging students to reflect upon their experiences of learning. Chiefly, students become aware of how they experience learning, of how they have achieved certain goals and satisfaction in their learning on the course, and their responsibility in this process. Next, teachers are provided with clear insights into how the students are experiencing learning activities on their courses - here students often provide sophisticated critiques, that raise questions about the quality of the learning on Design and Media Management that have pedagogical implications for the teacher.

In the report students provided insights into their experiences of a range of activities on the first year curriculum. Most of the reports include the student making suggestions for improvement of the curriculum. This could be clearly developed across the degree course and/or to encourage students in focusing upon specific issues that are deemed important by

staff and students. In this section, I analyse collectively the reports conducted above. Reference is also made to elements of the students conceptual framework described in Chapter 3 in order to inform how the course improves the quality of student learning. Here quality is described in terms of the approach a student takes to learning, his/her conception of learning and their epistemological development.

### 9.3.1 Epistemological Development in the Student

None of the eight reports show a student with a dualistic perception of knowledge (Perry, 1970). In conducting the report, individual students revealed awareness of the following:

- That a critical approach to learning is superior to simply 'absorbing' information
- The existence of different views on the same topics
- How learning can be either for grades or instead for understanding
- Their ability to interpret knowledge rather than accept it passively

Design and Media Management subject knowledge is divided by most students in the assignments, into those subjects that are factual on one side and those subjects that contain an interpretative, or discursive element. One student distinguished courses into those that are concerned with absorbing information and those that require critical thinking from the student. Students elaborated upon how this critical faculty is developed - how it is important to relate ideas together in learning; that interpretative subjects require students to provide evidence in order to strengthen their arguments and that a critical element is essential in the assignments.

Two students described how independent judgement must be reasoned through, that they were aware of the diversity of views on the course from different students and that resolution of this would lead to greater objectivity. One student linked development of argumentation with what was occurring on the course.

The necessity of a critical element in the curriculum is recognised by most of the students in their commentary, as well as some of the elements that constitute this. This could be developed either through more detailed focus on knowledge structures in first year on such a course or across the three year degree. Four students<sup>43</sup> speak in a generalised manner about epistemology above, they provide few examples to illustrate their points and they do not discuss specific thinking skills apart from argumentation<sup>44</sup>. This might be all one

---

<sup>43</sup> With conception 3 of learning

<sup>44</sup> Students were given a handout on Argumentation



should expect from a course which provides an introduction on critical thinking. Alternatively, it suggests that students were following the example of the teacher by choosing the example that I gave. However, I did not intend that argumentation would be all inclusive and encouraged students to be open in what they might study for the assignment.

### **9.3.2 Students Confidence in Learning**

In Chapter 6, I elaborated upon the issue of confidence in learning. Further insights were provided in the students' assignments here. Here students mentioned the importance of the following to their confidence in learning:

- The need for feedback from staff on the quality of their work during class and in assignments
- Successfully adapting to new learning challenges increases a student's confidence. For example, in making a successful transition from A level studies onto Design and Media Management
- The importance of reciprocal trust between student and teacher
- How confidence is improved with practice in learning tasks
- How initiative taken by the student exemplifies confidence

On Design and Media Management, confidence in learning played a pivotal role for students and this was discussed in many of the reports. One student perceived it as a skill which could be developed on the course through practice and feedback from fellow students and from staff. Confidence was seen as essential in adapting to the needs of a course which shifted responsibility for learning from the teacher to the student, thus explaining the difficulty that less assertive students would have with the course. Improved confidence meant the student was better prepared to show initiative in their learning on Design and Media Management. In critical thinking students with confidence could relate their experiences with relevant theory, draw conclusions from this with greater sophistication and this was shown in some of the reports above.

### **9.3.3 Student Perceptions of Learning and Understanding**

As with epistemology above, most students discuss what they understand learning to be in their assignments. While collectively the various contributions touch upon many criteria associated with learning, yet individually the students provide an introductory or personal account of learning. Thus, we see learning described as a skill which improves with

practice, where the student needs to be active and questioning in their approach to learning. Individually, students discuss the need for learning to relate to the future workplace, of the need for theory and recognition of responsibility by the student in his/her learning. Students distinguish between passive and active learning. Another student perceives learning as relating ideas to each other. Further individual contributions include the perception of learning as being permeable and changing, or of relating learning to one's previous experience. Two students argue that an authoritarian approach to teaching leads to ineffective learning for them.

Each student provides a basic understanding of learning. Also, with the exception of two students, the assignments reveal that students did not go outside the topic areas and handouts provided. As a result, students mainly discuss assessment, argumentation and expertise. It could be argued that students provide a fragmented interpretation of learning because they do not have the 'semantic' appreciation of their course yet and that this could only occur in second or third year. However, the course was intended only as an introductory course to students who were examining the process of learning for the first time. On this basis, their achievements are impressive in discussing learning and other elements of their thinking skills in first year. Not only does such information provide feedback to teachers on how to improve teaching, it also indicates how students could improve on such a course in second and third year, having been sensitised in first year to examining how they learn.

#### **9.3.4 The Implications for Pedagogy and Student Learning Experiences**

Students are clear and consensual on the qualities they associate with satisfactory learning, even if they do not always occur on the course. Being intrinsically motivated to learn is associated with satisfaction and quality in learning in some of the reports as opposed to extrinsically motivated learning. However they make proposals for change which staff can consider in curriculum design.

Following reflection on the course, and based either upon previous working experiences or learning during their first year on Design and Media Management, students provided the following suggestions for improving teaching:

- Three students rejected the notion of learning passively in a teacher centred format
- Also rejected is a curriculum which overburdens students with facts and information whereby they are obliged to memorise due to time restraints
- Learning requires the student to be active and involved



- In many of the reports the freedom to explore such as in a project or an assignment is recommended as well as being encouraged to question ideas and concepts presented to them. Such questioning it is proposed can lead to improved understanding.
- Feedback was essential on assignments and other work, and this was pointed out in three reports

While the above suggestions are individual and unconnected, they illustrate how a course on critical thinking can be modified to alert teachers to difficulties students are facing on their course. Teachers can then become aware of factors which may inhibit learning for their students and can decide to make improvements thereafter. So a course on critical thinking becomes a tool for curricular reform.

### **9.3.5 Assessment**

The importance attached by students to learning as being active, responsible and free to explore in their learning was further reflected in their perceptions of how they ought to be assessed. The idea of formal examinations was seen as far less effective than portfolio assessment in improving the quality of learning for the student. Here students could be more creative, dynamic and personally motivated to learn. Two reports indicated a sophisticated contrast between formal and portfolio assessment.

Three students discussed the importance of feedback on their assignments from teachers. Again, in discussing assessment, it is clear that teachers are provided with information on how to improve their assessment procedures even if this is at a rudimentary level in first year. It also indicates that students are sensitised or more aware of assessment and how its form can determine the outcomes of their learning. From this students become more critical of how they are assessed. One can see then how this can be extended to cover all elements of first year curriculum. The student becomes more sensitised to how they are learning. From this, they become more critical of their learning and of teaching methods. Finally, if staff are receptive to the feedback from students, then they can choose to respond with corresponding improvements to the curriculum and pedagogy.

### **9.3.6 Mature Students' Transitions to College**

Students commented often on their background and previous experiences before enrolling on the Design and Media Management course. In many cases their background would prove very influential in determining how they experienced learning on Design and Media

Management (and the Design and Media Management pedagogic rationale as outlined in the prospectus).

The comments of mature students in the above reports were especially significant and should clearly be considered by staff in designing their curriculum. Mature students often found the transition to college life difficult whether they were coming from work, unemployment or as single parents. They measured the quality of the course in terms of professionalism which they had experienced at work. Often concern was expressed by students questioning whether the course was suitable in strengthening their ability to find work after graduating. In all such cases mature students had high expectations of the course. Personal commitment to the course was deemed important.

The cultural background of the student must be recognised by staff whether in use of language on the course, in providing feedback on assessment, or where there might be ambiguity. This is important when one looks at a course such as Design and Media Management where there is great diversity of students in terms of nationality, age and previous experience. It was not only mature students that found the learning activities on Design and Media Management difficult. For students coming from A levels where they had learnt in a more teacher centred environment (with the end goal being to achieve success in formal examinations), their learning could be inhibited by new activities such as group work or portfolio assessment. However it would seem that through practice the student could adapt to the new learning environment which required more student responsibility in learning. One report above notes that less assertive students might have problems learning in this manner on Design and Media Management, where motivation was intrinsic in nature rather than being rewarded by more external rewards such as grades in exams.

### 9.3.7 Conception of Learning and the Process of Learning

In terms of Saljo's conception of learning, five<sup>65</sup> of the students above had conception 3, one had conception 4 and two had conception 5 of learning. The marks awarded to the students with conception four and five were superior<sup>66</sup> to those awarded conception three. This concurs with the expectation that students with a more sophisticated conception of learning would present a superior analysis of learning processes and thinking skills. For example, Lori and Assiya both scored over 70%. They both demonstrate greater confidence in their handling of concepts and in taking initiative through the survey work that they carried out with first and second year students. Their assignments show more

---

<sup>65</sup> All eight students were asked for this during interviews in chapter 8

<sup>66</sup> See section 9.1 for details on grading of the assignment; also Appendices XI and XII



confident and clear understanding of issues such as epistemology, assessment, learning experiences and teaching methods. Additionally, they propose improvements to the curriculum which could lead to more effective learning for students. In sum, they are aiming to interpret their learning experiences and skills in terms of the curriculum.

Students with conception three of learning above, tended mainly to be guided exclusively by the suggestions made in class in conducting the assignment. There is less detailed analysis of their learning process, less initiative taken and fewer proposals for improving learning and teaching on the curriculum.

The conception of learning that a student tends to indicate the quality of their thinking skills. Students with conception 5 provide more coherent suggestions for improving their learning and teaching methods. In introducing this course onto the first year curriculum, teachers also become aware of each students conception of learning. Teachers become aware of students with conception three of learning or less and so can be alerted to any remedial learning needs that they may have. Also, as an introductory course, it sensitises students with a lower conception of learning towards becoming more aware and critical of how they learn, with a view to improving this, assuming the support is there from teaching staff.

Table 1 overleaf, summarises the achievements of the eight students assessed on the *Process of Learning* assignment, within the context of the discussion above (9.3.1 - 9.3.7). (Words have been abbreviated to fit within Table 1).

**Table 1 Summary of Student Achievements on the Process of Learning Assignment**

Name	Nicola M.	Lori C.	Jackie M.	Vas H.	Donna B.	Carol R.	Jayne R.	Assiya A.
Conception of Learning	3	5	4	3	3	3	3	5
Assignment Grade (%)	55	76	65	40	65	53	55	75
Epistemological Development	Links discourse with interactive; distinguishes fact & discursive	Distinguishes between factual versus ambiguous, questioning learning	Critical approach prioritised over information absorption only	Very limited discussion, theory and analysis	Aware of student diversity of views; & intrinsic / extrinsic motivated learning	Cites importance of theory as well as subjective in learning; limited otherwise discussion	Cites evidence as more important than right wrong issues	Distinguishes learning for grades versus for understanding; permeable learning
Confidence in Learning	Links confidence with practice and feedback	Confidence in survey work, initiative and suggestions for pedagogical reform	Confidence affected by mature transition and overloaded curriculum	Very limited discussion, theory and analysis	Lower due to previous education; resistance to trying out new activities	Anxiety about what is expected of her on DAMM; aware of problems for less assertive student	Confident with DAMM "challenge" for personal responsibility and learning from others	Confidence in initiative and survey work
Perception of Learning	Learning as complex skill based entity; improve with questioning	Prioritises active, questioning learning over passive stance	Didactic seen as negative to learning; as sum of experience & knowledge	Very limited discussion, theory and analysis	Aware of changing role in learning; passive to active; diversity of views	Learning improves with maturity and accepting greater responsibility for own learning	Self motivation and sharing ideas; rejects passive learning	Relates ideas; discusses group learning; distinguishes internal versus external
Implications for Pedagogy	Teachers made aware of factors promoting learning	Suggests changes to assessment, responsibilities for student aware	Enhance learning with more time to study and greater student control	Very limited discussion, theory and analysis	Teachers aware of Donna's problems with adapting, group work and degree of passivity	Suggests improvements to communication with teachers	Problems for passive students on DAMM; link teaching methods/learning	Links curriculum design with quality of learning outcome
Assessment	Links importance of criticality with assignments	Need for feedback Democracy greater than authoritarian; survey work	Importance of process of learning (and product) to assessment	Very limited discussion, theory and analysis	Concerned about assessment on DAMM versus A levels	Radical suggestions for self assessed and self directional learning	Portfolio seen as dynamic and creative with student control of learning	Survey results: portfolio more effective than traditional assessment
Mature Student Transition	-	Confident transition and work shows potential for course	Difficulties due to cultural background with both teachers and students	Difficult transition	A level student yet recognises importance of adapting to new learning context	A level student	A level student	Personal commitment to learning leads to improvement
Confidence and the Process of Learning	Does not bring theory to assignment, mainly subjective	Clear, lucid & theory and experience; initiative; constructive proposals	Integrates theory and experience well recommendation as made	No outline or aims; no evidence for claims, poor elaboration and evaluation	Structured, clear report; integrates theory well; needs more elaboration and initiative	Clear confident expression; no theory or insights shows less confidence on theory	Clear insights and expression; lacks confidence in empirical support	Confident and constructive. Initiative and good implications for learning



#### **9.4 Teaching the Process of Learning - Syntax or Semantic?**

This thesis is concerned with whether teaching a general course<sup>67</sup> on critical thinking forms a syntax or semantic<sup>68</sup> for students in their first year of studies. I refer the reader here to sections 2.8 and 2.9 for a full discussion.

Taken collectively, there are many benefits for students derived from engaging such a course. Students focused upon many subject areas including epistemology, perceptions of learning, confidence in learning, assessment and information quality. Such engagement led to the following learning outcomes, on the whole:

- Awareness develops in the student of basic epistemology such as being aware of the difference between concepts as right or wrong versus the strength of concepts based upon the strength of evidence supporting them.
- Insight into how students perceive learning on a personal basis
- Awareness of the importance of confidence to effective learning and an elaboration of how confidence can be improved with teachers' involvement
- Discussion of thinking skills used in areas such as assessment, expertise and argumentation on the first year curriculum
- Proposals for improving learning in the areas above which could lead to improvement in pedagogy on the course

Students with a more progressive conception of learning were more confident in handling the assignment and showed initiative in conducting survey work with other students<sup>69</sup>. Five assignments covered topics suggested by the teacher only and their responses were quite introductory and personal. However, it must again be pointed out that this should be expected as the course was both introductory and needed to be relevant for the student to their first year of studies. It could be argued that this shows the limitations of such courses because they are not embedded within the course material. However, critical thinking skills courses do need to be relevant to first year studies and must recognise that the student may not have had prior experience of such learning. Or, indeed s/he may be against such learning as they feel that it does appear to assist them with their end of year portfolio assessment.

While it is possible to teach a general course on critical thinking skills to first year

---

<sup>67</sup> This course was also taught to students on a Psychology in the Community degree course. See Appendix VI

<sup>68</sup> According to McPeck's (1990) interpretation

<sup>69</sup> Table 1

students, it will remain merely a 'syntax' if it is not related to the subjects that they are studying on the course. However, it does not need to be embedded or derived from the course knowledge itself as McPeck argues. The student could in theory provide examples of thinking skills being used by him/her in other contexts such as in previous education. However, it makes sense in first year to pitch the course at the right level and the subjects studied in first year are most appropriate for the student to explore in creating an introductory course on critical thinking skills. Also s/he can readily use it as a tool for improving learning in their first year studies.

If we were to place high expectations on the outcomes of such a course in first year, then one could argue that the assignments above do not reveal students ability to think critically across subject domains having studied the Process of Learning. However, if we are to be realistic about what can be achieved in an introductory course on critical thinking, then we can see how through the assignments the following has been attained. Students using this general course on critical thinking:

- Were sensitised towards examining how they learn
- They could comment upon critical thinking skills used on the course. Though this may have been limited per student, as a whole the assignments indicate that students understood critical thinking skills in relation to the course.
- There were other benefits to be derived from this course. Students provided feedback on confidence for example and how it affects learning outcomes.
- Students with a higher conception of learning showed greater competency in studying such a course<sup>70</sup>
- The course acts as a medium in providing educators with feedback on learning and teaching issues. Thus it can provide impetus in improving pedagogy

As students become more used to the idea of taking part in courses such as these, it is proposed that they would become more skilled in such tasks across the three years of their studies. Teaching critical thinking, in this developmental way, would lead students towards gaining more meaning from the course, both in relation to their studies and in the workplace. It would become more of a 'semantic' course and less of a 'syntax'. If too high an expectation is place upon first year students with such a course, then it would appear to be merely a 'syntax' for them. But if educators see such courses as introductory in first year, yet continuing into second and third year on a developmental basis, then it becomes a meaningful course with benefits both to the student and the educator intent on improving pedagogy. Evaluating the benefits of such a course across the degree would need to be the basis of further research, in responding to the debate on whether teaching critical thinking skills is a *syntax* or *semantic*.

---

<sup>70</sup> Table 1



Sections 9.3.1 to 9.3.7 discuss the findings that emerged from the assignment. The syntax/semantic dichotomy becomes a useful tool for the debate on how to achieve effective learning outcomes for our students in higher education.<sup>71</sup> Examining the questions posed by this dichotomy raises or awareness of the factors which promote or inhibit learning in higher education. It also reveals that there are more issues involved that suggest the dichotomy is useful up to a point. These other factors have been discussed, based upon the data from chapters 6-9. In the final chapter, I bring together the diverse range of issues and discuss the dichotomy in terms of these factors.

---

<sup>71</sup> Chapter 2

## 10. Conclusions

### 10.1 Introduction

The aim of this doctoral research is to evaluate the effectiveness of encouraging students to reflect upon their experiences of learning and the use of critical thinking skills in their first year of study at University.<sup>72</sup>

In conducting this research, it has been possible to respond to the debate on whether teaching critical thinking to first year students constitutes a 'semantic or syntax'.<sup>73</sup> This research has also further extended our understanding of student learning theory<sup>74</sup>, particularly the notion of confidence and how it determines the quality of learning outcome for students.

This case study employed an action research methodology<sup>75</sup>. The design, implementation and evaluation of the *Process of Learning* included recognition of students' personal learning experiences within the context of their learning environment on the Design and Media Management degree course. This was achieved through conducting student and staff interviews over 18 months<sup>76</sup>, triangulating findings from the *Process of Learning* sessions and analysis of the final assignments. The contributions of this thesis to the debate on teaching critical thinking to first year students follow in the next section. They are based upon cross referencing and analysis of the research data gathered using the above methods. The research data has been presented in chapters 6-9.

During the interviews prior to the implementation of the *Process of Learning*, a number of factors emerged which influenced the design, implementation and evaluation of the *Process of Learning*. It is helpful to recall these factors which influenced the contributions of this research in the sections 10.2 and 10.3. These key findings are as follows:

- Firstly, students studying on Design and Media Management recognised the importance of being responsible for their own learning. Students acknowledged therefore that they had considerable freedom in their learning in that they could work very hard across the year or do very little until the deadline for handing in work. Learning on Design and Media Management involved new learning

---

<sup>72</sup> The original motivation for conducting this research was to respond to a widely cited problem in colleges (whether in the UK or the US) that was concerned with students' apparent lack of ability to think critically while studying at college, or even after having graduated. I respond to this debate in terms of whether teaching general critical thinking courses is meaningful to first year students.

<sup>73</sup> Discussed in chapter 2

<sup>74</sup> Discussed in chapter 3

<sup>75</sup> Discussed in chapter 4

<sup>76</sup> Before and after the *Process of Learning* with students



activities such as portfolio assessment. Students expressed concerns with certain aspects of the first year curriculum. Most salient of these concerns was the perceived lack of integration amongst the three departments of Media, Management and Design.

- Secondly, students expressed a need for greater feedback from staff regarding assessed work and some felt that the espoused aims of the course as described in the prospectus did not match the reality in the classroom. Also some students, especially mature students, were often concerned about how well the Design and Media Management degree would prepare them for a future career. Some students had difficulty making the transition to college life, particularly students who had just completed secondary school, and also students who were not very confident in taking responsibility for their own learning.
- Thirdly, staff needed to improve integration across the three disciplines and engage in more collaborative teaching and agreement of assessment objectives. Ambiguity in teaching was also creating a dilemma. Teachers had not necessarily resolved the conflict between being perceived as authority figures by students yet at the same time they were encouraging students to doubt authority.
- Fourthly, staff on Design and Media Management also recognised that organisational pressures and limited faculty resources placed limits upon what could be achieved. These challenges also influenced student reaction to the *Process of Learning* adversely or positively and were outside my control. These factors are incorporated into the discussion in the following section.

I divide the contributions of this thesis into two sections. In section 10.2, I discuss the findings about student learning. In section 10.3, I discuss the findings of this research in terms of the debate on whether teaching critical thinking improves the quality of learning for the student.

## **10.2 Contribution of this thesis to Student Learning In Higher Education**

### **10.2.1 Confidence In Learning**

The concept of confidence in learning was introduced in chapter 3 (Beatty and Morgan, 1992). There is an important relationship between confidence and effective learning

outcomes<sup>77</sup> for students in higher education. A student who is confident in his/her approach to learning will achieve more effective learning outcomes than if s/he does not feel confident in themselves about their learning. Findings from this research in chapters 6 and 9, detail how factors in the learning environment can promote confidence.

This research found that confidence in learning (for first year students in higher education) improves when students:

- Receive feedback from staff regularly on the quality of their work
- Adapt to new learning challenges which require a shift in how they had previously perceived learning
- Perceive reciprocal trust and respect between teacher (as authority) and him/herself on a personal level
- See themselves improving learning tasks through practice and exercises
- Demonstrate initiative - this is an indicator of confidence in learning
- Know that the course material is relevant to their personal life and to a future career<sup>78</sup>
- Improve their critical thinking skills

Educators in higher education can improve the confidence students have in learning by acknowledging the criteria above and addressing how teachers can respond favourably in their implementation.

### 10.2.2 Benefits for Students from Participating in the Process of Learning

Evidence from chapters 7,8 and 9<sup>79</sup> reveals that through the *Process of Learning*, students developed awareness of thinking skills and learning processes that they used in year 1. What commenced as an introductory awareness in class sessions became more sophisticated through undertaking the *Process of Learning* assignment. Students became more aware of assumptions that they themselves had made about learning. They discussed awareness of teaching methods and how some methods are more effective for learning than others. They examined assessment and how different types of assessment can affect learning. This was evident in the assignments for example in chapter 9. These examples illustrate how students became more aware of personal and environmental barriers to learning. The implication of this is that students and teachers can identify those factors which either promote or inhibit effective learning<sup>80</sup>. They can then seek to negate those

---

<sup>77</sup> In chapter 3

<sup>78</sup> Understanding the student's orientation to learning is important here

<sup>79</sup> Includes triangulated data, interviews and assignments

<sup>80</sup> Effective learning can be interpreted through the student learning theory framework in chapter 3



factors which inhibit effective learning while enhancing those activities which promote it. For example, poor feedback from teachers on assignments can be negated through more comprehensive notes being provided with the assignments.

Students also become aware of their perceptions of learning. The assignments reveal students becoming aware of their own personal perceptions of learning. Individually this may be at an introductory or basic level, yet taken as a whole many aspects of learning were discussed. For example, two students revealed in the assignments that they were happy with their own learning method and did not wish to change. Whether such learning methods are effective is another issue, but it begins to reveal to the student their personal responsibility for learning. It provides insights for staff of students conception of and approach to learning with the potential for remedial courses or changes to teaching methods.

Becoming aware of learning processes can therefore become a medium for improving pedagogy. Both teacher and student have personal responsibilities to ensure this is successfully undertaken in first year. The assignments in chapter 9 can become the basis for improving pedagogy on the degree course. For example, individual students could distinguish between active and passive learning or discuss assessment and how it determines the quality of learning outcome for the student. More competent assignments included survey work on learning issues as well as suggestions for improving teaching and learning on the course. For example, one assignment was highly constructive in suggesting improvements to assessment procedures on the course.

The *Process of Learning*<sup>81</sup> introduced students to critical thinking skills according to the four domains of critical thinking discussed in chapter 2 (Paul and Nosich, 1991). The course included: elements of thought, macroabilities and affective dimensions. Triangulated data<sup>82</sup> revealed that students had become sensitised to the above domains at a basic level. Through the assignments, students had begun to consolidate this introduction to critical thinking to different competencies. Low scoring assessments tended to be reproducing the ideas presented in the sessions with very little initiative and analysis of these skills. Higher scoring assignments revealed greater understanding of critical thinking skills, how they apply to the Design and Media Management Degree and how they can be promoted to improve learning outcomes on the course.

Evidence suggests a direct relationship between the student's conception of learning and his/her ability to think critically. Students with a higher conception of learning in the assignments revealed a greater ability in discussing critical thinking on the course. They

---

<sup>81</sup> See Appendix V

<sup>82</sup> Chapter 7

could link these skills to their own learning and discuss their manifestation across the course modules. For example, individual students discussed: the importance of questioning knowledge and concepts, of looking for assumptions made by experts, and how interpreting concepts is preferred to passive acceptance of them. Conversely, students with a lower conception of learning found some of the sub-sessions difficult. This emerged during the interviews<sup>83</sup>.

Students in their first year of study at college in the United Kingdom can therefore benefit from general critical thinking courses like the *Process of Learning*. This research found that:

- Students become sensitised or aware of the critical thinking skills that they use in first year. The subsequent use of these skills could lead to improvement in learning quality outcomes in second and third year studies.
- Students with a higher level of competency discuss these thinking skills more coherently in terms of their personal responsibility in learning.
- Students achieve insights into their own personal perception of learning and begin to assess objectively the implications of what they have learnt from this.
- Wide ranging feedback from students discussing critical thinking skills and learning activities can provide a medium for staff committed to improving both pedagogy and the curriculum.
- Better understanding of critical thinking skills can improve his/her confidence in learning.

Overall, these factors indicate support for the teaching of general critical thinking skills courses in first year at University in the United Kingdom. It provides a foundation for implementing critical thinking in subsequent study during their second and third years of study. The key benefits of such implementation are that the student achieves higher quality learning outcomes<sup>84</sup> and the teacher through feedback can implement improvements to teaching and the curriculum to facilitate this objective.

There were difficulties for some students in studying the *Process of Learning* and these were communicated during the class sessions, the interviews and the assignment. I will discuss these points in the next section and then address whether it is meaningful to teach critical thinking to first year degree students.

---

<sup>83</sup> Chapter 8

<sup>84</sup> Chapter 3 discusses the framework for measuring this quality in learning



### **10.3 Teaching the Process of Learning - Syntax or Semantic?**

Students experienced difficulties on the *Process of Learning* course. I summarise these findings first before generalising in terms of the debate on teaching critical thinking. These challenges are summarised as the following points:

- The course was too complex, overloaded or psychological and it was difficult to relate to the media and design sides of Design and Media Management. As a result some students stated that their enthusiasm for the course was diminished.
- Anxiety surfaced where the student was not clear on the purpose or had not expected such a course on Design and Media Management.
- Problems arose for those students who were focused only upon the assessment requirements of the course.
- The Design and Media Management degree was already too ambitious and therefore adding this course to the curriculum created further problems.
- Student diversity in terms of orientation, age and other factors led to some students enquiring as to the relevance of the course to their future degree or job prospects.
- The course was necessary only as a remedial tool for students experiencing difficulties with learning on the degree course.
- It was pointed out that students know how to learn through previous experience and would resist change now to 'tried and tested' practice.

I refer the reader to chapter 2 where McPeck's (1990) views that such courses provide a syntax rather than a semantic for students are discussed. Instead he proposes that the thinking skills students require are uniquely inherent to the discipline that they are studying and they should focus exclusively upon these. He believes that what needs to be done to facilitate the skills within the discipline is to examine the teaching methods in order to promote those methods which facilitate this.

The first two points above would appear to support those educators who believe that such courses are not meaningful to students in their learning. They would seem to support the argument McPeck makes that such courses offer a syntax to students which bears little meaning to their studies. Thus individual students find the *Process of Learning* complex and/or are unable to relate it to the degree course. While I taught the course to both psychology and management students<sup>49</sup>, it became clear to me that the teacher requires knowledge of the subjects on the course as well as skill in teaching critical thinking courses. I recall feeling more comfortable teaching the course to psychology students

---

<sup>49</sup> On two separate degree courses. This emphasised that the course was a general course on critical thinking.



because this reflected my own training and background. Thus for students in their first year, engaging critical thinking skills for the first time, the need for discipline specific examples is very important. This would support McPeck's argument that such courses in order to be effective need to derive from within the discipline itself. Without this derivation the first two points above suggest that teaching critical thinking for first year students provides a syntax rather than a semantic for students. However, there are a number of further points of evidence<sup>86</sup> which instead support the assertions of those who advocate teaching courses such as the *Process of Learning*. They provide a convincing explanation for why students found the course 'complex or psychological'. These points lead me to conclude that teaching general critical thinking courses is meaningful<sup>87</sup> to students in their first year of studies. These key findings (1-4) are now discussed.

1. In section 10.1 above, the Design and Media Management learning environment into which the *Process of Learning* was integrated is discussed. Here, students were coming to terms with their new experiences and responsibilities for learning, some more successfully than others. Lack of integration across the three disciplines, student orientation to learning, heavy course workload and ambiguity were causing problems for first year students. These factors clearly contributed to difficulties for some students with the *Process of Learning*. For example, adding this course to a degree already containing heavy course work created extra work which several students did not want.

2. It makes sense to use subject specific examples for students in first year. Students are being introduced to a new learning environment and new subjects. At this formative stage of their studies in higher education, the use of direct examples makes such courses more accessible. For example, an incoming psychology student can be given examples of how scientists like Faraday or psychologists like Freud must gather evidence to support their theories. The example with Freud is more meaningful however to what they are just commencing to study in first year. Evidence from the triangulated data and the interviews suggests that these courses needed to be pitched at the right level for first year students. This is in large part achieved by using clear and relevant examples from the subject disciplines.

3. Students in their first year were keen to be involved directly in activities involving the design and media sides. Several mature students were focused upon the end goal of their degree course which was to get a degree that would lead to securing a future career. Evidence from the triangulated data and the interviews showed that some students were concerned that the *Process of Learning* bore no relevance to their interests or objectives. Therefore the difficulties presented above were partly due to students not fully

---

<sup>86</sup> From chapters 6-9

<sup>87</sup> In McPeck's terms



understanding the relevance of the *Process of Learning* to their aims or orientation to study. The purpose of such courses therefore needs to be clearly articulated in first year otherwise students can become initially resistant to such courses.

4. The lack of integration amongst teachers across the three disciplines led to students pointing to contradictions between course objectives in theory versus practice. In a degree where each discipline was seen to be doing its 'own thing', the *Process of Learning* was identified in part with the management side alone. This can in part explain why individual students were unable to relate the course to the design and media sides of the course. It further illustrates the need for cross faculty support if critical thinking courses are to be successfully implemented.

The evidence from this thesis suggests that both McPeck and Paul have valid points to make. Initially the difficulties<sup>18</sup> would appear to support McPeck's argument that such courses are not meaningful. McPeck is correct in asserting that such courses need to be meaningful by drawing upon examples from the subjects the students are studying at the time. The evidence here also indicates that the teacher requires knowledge of the subject disciplines in order to make the course meaningful to first year students.

The four findings above, however, lend convincing support to the proposition by Paul and his protagonists that general critical thinking skills courses such as the *Process of Learning* can be taught meaningfully to students entering college. These benefits have been discussed in the previous section. The findings of this research suggest, in fact, that the 'syntactic versus semantic' dichotomy proposed by McPeck is an oversimplification of the debate. The four points of evidence presented above illustrate that there are other factors at play which contributed to the difficulties or anxieties expressed by students on Design and Media Management. In order therefore to improve the quality of learning outcomes from general courses on critical thinking, the following recommendations are made based upon the findings of this research:

- Educators must ensure that the relevance of the course is clearly communicated to students in light of the above difficulties
- The purpose of the course must likewise be clearly communicated
- The scope of the course must not be too ambitious, recognising that students are coming to terms with many new learning experiences
- The educator should use subject specific examples in first year. This requires that the educator be familiar<sup>19</sup> with the first year subject material
- Cross faculty awareness and support is needed to guarantee the full success of

---

<sup>18</sup> Presented at the start of this section.

<sup>19</sup> S/he does not need necessarily to be a member of that faculty.



these courses

- The course should lay the foundation for follow up courses in subsequent years of the degree

Courses like the *Process of Learning*, should seek to introduce or sensitise students to the critical thinking skills that they use in their learning in their first year studies. This should then progress to basic analysis by them through activities such as an assignment. This can then be developed during the subsequent years of their degree. Continuity is essential if students are to apply what they have learnt to their studies and future career. If we limit the scope to this in their first year of study then such courses provide a students with a 'semantic' the potential of which is presented above. However, if educators include too much content in such courses in first year, then the course becomes more of an abstract and complex course with less meaning or relation for them in their studies.

#### **10.4 Validity of Findings**

The conclusions that I have made in this research program are based upon the cross referencing of data from several different sources. The data was largely qualitative in nature. The interviews presented in chapters 6 and 8 were semi-structured in format. The responses were analysed through several readings of each interview to determine those criteria which bore relation to the central question of this thesis. Responses which recurred across different interviewees were detailed and presented in these two chapters. The analysis in chapter 6 helped inform the design and evaluation of the *Process of Learning*. The validity of this analysis is strengthened by the fact that many of the difficulties faced by students participating on the *Process of Learning* were anticipated at this early stage.

In chapter 7, the findings were triangulated by cross referencing the responses of students, Ella the participant observer and myself the teacher. This procedure is explained and justified in chapter 4 on methodology. The assignments were assessed and cross referenced by Dr David Grant and myself. The quality of each assessment was validated in this manner through agreement and a resultant mark was awarded according to the quality of the completed work. Dr Grant is Director of the faculty and has twenty years experience of teaching in higher education. He is also the key player involved in implementing educational innovations on the Design and Media Management faculty.

The conclusions within this chapter were based upon cross referencing the findings from all four strands of the research. The validity of this analysis is further strengthened by the fact that most of the findings presented, recurred at least once during the interviews, the triangulated data and/or the assignments. There will always be room for improvement with



every research undertaking in education. In this research it would have been interesting to include further assignments in chapter 9. However, practical limitations have to be imposed due to the resources at hand and time constraints. Therefore, I chose eight assignments which reflected a range of competencies from poor through average to excellent. Throughout this research I used professional judgement in choosing the research methods that I did and the subsequent analysis. While preparing a research plan in advance, it had also to be flexible and open to change according to events occurring within the Design and Media Management faculty at that time.

As teacher and researcher<sup>90</sup>, I had to work flexibly with staff on the Design and Media Management faculty. This requirement also applied to the research methods that I used. Perhaps the most important consideration is to remember that action researchers are human! One must allow for the fact that class activities do not always proceed as well as you might like them to. As action researcher I needed to be adaptive to the teaching situation during and after the session and to seek improvement with the methods that I was using. The nature of action research demands flexibility with choice of research methods as there may be pragmatic or ethical considerations that present themselves during the innovation. It must be flexible also because you can make new insights into student learning for example. It must also be flexible as the goals of your research may change due to these new insights.

### **10.5 Recommendations for Future Research**

The objectives of this doctoral research were to respond to the debate on whether teaching critical thinking skills courses to first year students amounts to a *semantic* or merely a *syntax* for students. A number of important issues related to this debate emerged from the findings.

The following areas are recommended for future research:

- The relationship between student use of critical thinking skills and his/her conception of learning should be explored. The indicators from this research suggest that there is a direct and positive relationship between both.
- How should courses like the *Process of Learning* develop and be implemented across the degree course? Should such courses use the four domains of critical thinking proposed by Paul and Nosich?<sup>91</sup> If so, educators need to establish their learning objectives for each degree year within this framework. Educators

---

<sup>90</sup> Action researcher, chapter 4

<sup>91</sup> Section 2.6

would also need to consider individual student's abilities and how to ensure faculty support which is vital to the success of teaching critical thinking.

- Investigations should be conducted on the implementation of critical thinking skills courses within other disciplines such as in the sciences or medicine. Here, comparative work should be conducted to assess those factors which may be special to a particular discipline. For example, the Design and Media Management course was quite innovator, unlike other courses which could be termed more conventional.
- Whether there should be different courses for students with different conceptions of learning in second year and beyond. In other words, should such courses be remedial in nature for students with a lower conception of learning and more advanced for students with a more progressive conception of learning? Having determined each student's critical thinking skills upon completion of first year studies, educators could consider implementing more intensive courses for students with lower conceptions of learning. The intention here would be to improve their range of critical thinking skills in order to achieve parity with more competent students.
- Further work is required to examine the relationship between implementation of these courses and cross faculty support for them. The indicators here are that full co-operation from faculty staff for such courses will greatly benefit their implementation and successful uptake. This includes a commitment by staff to seek to improve pedagogy where suggestions have been made through these courses.
- There is a need to devise further methods to assess students' knowledge and application of critical thinking skills in higher education here in the United Kingdom. This should extend to all years of a degree course and be refined according to subject discipline. This could include ideographic and normative investigations such as standardised tests.
- One of the most important benefits of reflecting upon one's teaching is that it makes the teacher aware of the quality of his/her teaching. S/he can raise questions about methods of teaching, about assessment, about why a particular class was or was not satisfying. In other words it provides a focus for the teacher on pedagogical issues. In researching the educational innovation that I was involved with I became increasingly aware of the importance of involving students in the research process. If teachers are concerned with improving pedagogy and the quality of student learning then it makes sense to seek the co-operation of students in this research process. There is a need here to determine the most effective methods for involving students in researching unobtrusively their own learning processes.



Further research is recommended into the issues above in order to extend and refine our understanding on the teaching of critical thinking skills to students in higher education. It will provide insights into those factors which either promote or inhibit effective learning of critical thinking skills. This in turn can be implemented by educators and teachers intent on improving the quality of learning for their students. It would also help develop our conceptualisation of how students learn in higher education as manifested in the student learning theory framework.

### **10.6 Recommendations for Teachers**

The following recommendations are made for teachers planning to develop the critical thinking skills of their students:

- Seek the support of staff across the faculty for the implementation of critical thinking courses. This includes agreement on adapting curriculum and assessment methods so that it facilitates and does not hinder the implementation of critical thinking skills across the first year course.
- Clearly articulate the reasons why students are studying critical thinking on their course and explain the benefits to them from diligent study of such a course.
- Provide regular feedback to students on how they are progressing with their critical thinking skills.
- Develop procedures with fellow staff on how to assess development of thinking skills by students. This is best achieved by using the comprehensive framework developed by Paul and Nosich (1991). The teacher is recommended to assess skills both before, during and after the course has been taught in the mould of teacher as researcher as well as through formal assessment at the end of term time.
- Using the framework developed by Paul and Nosich (1991) plan to cover this over the three/four years of the students' studies at college. It is most important in year one to make sure that the course is not too complex as students will lose enthusiasm for such a course. In other words students must see the relevance of the course to their studies and this is best achieved in year one through a 'gentle' introduction.
- Use domain specific examples.
- Teachers should also consider whether critical thinking courses might best be used for their students as a remedial tool, which helps weaker students to 'catch up' with more competent students.

### **10.7 Recent Research on Critical Thinking**

The critical thinking approach is in the same line as the learning to learn philosophy, the transferable skills agenda and the graduateness goal to a point. However, the advantage of critical thinking skills is that it has been comprehensively defined and

debated since the 1980s in higher education. The definition by Paul and Nosich (1991) provides a powerful tool for educators and teachers to implement critical thinking skills over the duration of their graduate studies. Section 2.6 lists these domains – the elements of thought, macroabilities, affective dimensions and intellectual standards. A student proficient in all four domains of critical thinking upon completion of his or her studies will be very competent in dealing with the challenges faced in society and in the workplace.

The philosophy is not as comprehensive as critical thinking in its definition – critical thinking includes more about preparing the individual for life, as a responsible citizen. The agenda is similar to critical thinking in attempting to link skills to the workplace. Unlike critical thinking which adopts a more holistic approach, it looks at specific sets of skills such as development of IT skills (Eraut et al., 2000). The goal, a recent term, has some elements of critical thinking but is focused mainly upon developing critical thinking around a particular domain. Critical thinking differs in that it transcends different subject domains, but draws upon examples from a particular domain (those subjects being studied by the student at that time) in order to become more easily understood, especially in first year.

Further research on critical thinking has been conducted since the original thesis was completed. The central question of how to teach critical thinking continues to be debated. Vardi (1999) asserts that it is essential to teach critical and creative thinking skills to students so that they can deal more competently with the challenges facing them in society and the workplace today. He argues (similar to this thesis) that critical thinking is taught most effectively when it uses examples from the domain in which it is taught (domain specific). He concludes that the development of students' critical thinking skills will increase their depth of knowledge and appreciation of course content. This thesis found that first year students especially must perceive critical thinking courses to be relevant to their studies. Jones (1999) refers to the debate between those who advocate the teaching general critical thinking and those who believe that critical thinking must be subject specific. In an ongoing study he argues that critical thinking can be made relevant for student through infusion of thinking skills into course content matter in an ordered and logical sequence.

Marsh (1996) points out the need for greater research on how to effectively evaluate critical thinking skills programmes. This thesis responds to this challenge by proposing that the teacher as researcher (section 4.7) evaluates critical thinking courses using the student-learning framework (chapter 3). Marsh (1996) concludes that most educators now agree that teaching thinking skills is essential to improving the quality of student learning yet asks how it can be done. He points out that this can be difficult due to the resistance that students have to new ideas that may challenge their religious or political beliefs. This problem may become fortified in older people who are 'certain' of their belief system and thus resistance to change. He cites the paucity of research that has been conducted in evaluate the effectiveness of critical thinking skills programmes. Marsh believes that more objective instruments are required to aid teachers in evaluating critical thinking skills programmes.

It is hoped that this thesis has gone a considerable length in responding to this fundamental questions of how to teach critical thinking as well as assess it.



## 11. Bibliography

Altrichter, H. (1993) 'The Concept of Quality in Action Research: Giving Practitioners a Voice in Educational Research'. In Schratz, M. (Ed.) *Qualitative Voices in Educational Research*. Science Press: Basingstoke.

Anderson, L.W. and Pigford, A. (1988) Teaching within Classroom Groups: Examining the Role of the Teacher. *Journal of Classroom Interaction*, 23(2), 8-13.

Anderson, T.D. and Garrison, D.R. (1995) Critical thinking in distance education: Developing critical communities in an audio teleconference context. *Higher Education*, 29, 183-199.

Attias, B. (1991) Power in the Classroom? A plan for the Destruction of the Universities. 10 pages. Paper presented at the Annual Meeting of the Central States Communication association: Chicago, Illinois.

Basadur, M., Wakabayashi, M. and Graen, G.B. (1990) Individual Problem-Solving Styles and Attitudes Toward Divergent Thinking Before and After Training. *Creativity Research Journal*, 3(1), 22-32.

Beaty, E. and Morgan, A. (1992) Developing Skill in Learning, *Open Learning* 7(3) 3-11.

Becker, H.S., Geer, B. and Hughes E.C. (1968) Making the Grade, The Academic Side of College Life. U.S.: John Wiley & Sons, Inc.

Belenky, M.F, Clinchy, B.M, Goldberger, N R and Tarule, J M (1986) Women's Ways of Knowing. New York: Basic Books.

Berman, L.M. (1984) Educating Children for Lifelong Learning and a Learning Society. *Childhood Education*, 61(2), 99-106.

Blai, B. (1990) Critical Thinking: The Flagship of Thinking Skills? *Scientia Paedagogica Experimentalis* 27(2), 295-303.

Blanchard, B.E. (1984) Indicia Of Teaching Efficiency, *Scientia-Paedagogica Experimentalis*, 21(2), 172-180.

Brannen, J. (Ed.) (1992) 'Combining qualitative and quantitative approaches: an overview'. In J. Brannen (Ed) *Mixing Methods: qualitative and quantitative research*. Avebury: Aldershot.

Bronfenbrenner, U. (1977) Toward an ecology of human development. *American Psychologist* 32(7) 513-531.

Brown, R. (1993) The language of knowing and learning: bridging the apparent dichotomies. *Paper presented at the 'Improving Student Learning Symposium' Research and Practice. Warwick University, September 1993.*

Bryman, A. (1992) 'Quantitative and qualitative research: further reflections on their integration'. In J. Brannen (Ed) *Mixing Methods: qualitative and quantitative research*. Avebury: Aldershot.

Carr, W. and Kemmis, S. (1986) *Becoming Critical: Education, Knowledge and Action Research*. Great Britain: The Falmer Press.

Carlisle, K.E. (1985) Learning How to Learn *Training and Development Journal*, 75-80.

Chi, M.T.H. and VanLehn, K.A. (1990) The Content of Physics Self-Explanations *Learning research and Development Centre*, Report no. 12, University of Pittsburgh.

Colaizzi, P.F. (1978) Psychological Research as the Phenomenologist Views It. In R.S. Valle and M. King (Ed.) *Existential-Phenomenological Alternatives for Psychology* New York: Oxford University Press.

CSUP (The Committee of Scottish University Principals). (1992) *Teaching and Learning in an Expanding Higher Education System: Bibliography*. Report of a Working Party of the Committee of Scottish University Principals. Midlothian: Polton House Press

De Bono, E. (1977) *Lateral Thinking*. Great Britain: Harmondsworth

DeNitto, J. and Strickland, J. (1987) Critical Thinking: A Skills for all Seasons *College Student Journal*, 21(2), 201-204.

Entwistle, N. (1987) A model of the Teaching-Learning Process. In J.T.E. Richardson, M.W. Eysenck and D.W. Piper (Eds) *Student Learning: research in education and cognitive psychology* Milton Keynes: SRHE and Open University Press.



Entwistle, A. and Entwistle, N. (1992) Experiences of Understanding in Revising for Degree Examinations, *Learning and Instruction*, 2, 1-22.

Entwistle, N. and Marton, F. (1994) Knowledge objects: understandings constituted through intensive academic study, *British Journal of Educational Psychology*, 64, 161-178.

Evans, T. and Nation, D. (1989) Critical Reflections in Distance Education. In T. Evans and D. Nation (ed) *Critical Reflections on Distance Education*. Brighton: The Falmer Press.

Feiertag, J. and Chernoff, L. (1987) Inferential Thinking and Self Esteem - Through the Junior Great Books Program *Childhood Education*, 63(4), 252-254.

Gibbs, G., Morgan, A. and Taylor, L. (1980) An example of the quality of Students' Understanding: Initial Conceptions of Psychology *Study Methods Group*, Report No. 6, Institute of Educational Technology, The Open University.

Gibbs, G., Morgan, A. and Taylor, L. (1981) Why Students Don't Learn "*Teaching at a Distance: Research Supplement No. 1, 1981*"

Gibbs, G. (1981) *Teaching Students to Learn, A Student Centred Approach*. Milton Keynes: The Open University Press.

Gibbs, G. (1990) *Improving Student Learning Project* Briefing Paper for participants in the CNAA Improving Student Learning Project: Oxford Polytechnic

Gibbs G. (1992) *Improving the Quality of Student Learning*. Bristol: Technical and Educational Services Ltd.

Gibson, R. (1986) What is Critical Theory? In R. Gibson *Critical Theory and Education* London: Hodder and Stoughton.

Glaser, B G and Strauss A L (1973) *The Discovery of Grounded theory: strategies for qualitative research*. Aldine Publishing Company: Chicago.

Glaser, R. (1984) Education and Thinking - The Role of Knowledge. *American Psychologist*, 39(2), 93-104.

Gow, L. and Kember, D. (1990) Does higher education promote independent learning? *Higher Education* 19:307-322.

- Hammersley, M. (1992) 'Deconstructing the qualitative-quantitative divide'. In J. Brannen (Ed) *Mixing Methods: qualitative and quantitative research*. Avebury: Aldershot.
- Hammersley, M. (1992a) Research Training Guide, internal report, School of Education, Open University.
- Hauser, J. (1991) Critical Inquiries, Uncertainties and not Faking it with Students. 31pages. Paper presented at the Annual Conference of the Center for Critical Thinking and Moral Critique, Sonoma State University, Rohnert Park, California
- Heinrichs, A.S. and LaBranche, S.P. (1986) Content Analysis of 47 College Learning Skills Textbooks. *Reading Research and Instruction*, 25(4), 277-287.
- Hicks, R.E. and Southey, G.N. (1990) The Watson Glaser Critical Thinking Appraisal and the Performance of Business Management Students. *Psychological Test Bulletin*, 3(2), 74-81.
- Hodgson, V. (1984) Learning from lectures. In F. Marton, D. Hounsell and N. Entwistle (eds), *The Experience of Learning*, Edinburgh: Scottish Academic Press.
- Holmes, B.C. and Ammon, R.I. (1985) Teaching Content with Trade Books - A Strategy. *Childhood Education*, 61(5), 366-370.
- Hounsell, D. (1984) Learning and essay writing. In F. Marton, D. Hounsell and N. Entwistle (eds), *The Experience of Learning*, Edinburgh: Scottish Academic Press.
- Howard, G.S. and Engelhardt, J.L. (1984) Teaching Rival Hypothesis in Experimental Psychology. *Teaching of Psychology*, 11(1), 44-45.
- Kelly, G. (1955) *Psychology of Personal Constructs*, Volume 2 Clinical Diagnosis and Psychotherapy. Norton publishers.
- Kemler, W. (1990) Suggested Guidelines for Selecting or Creating Programs to Enhance Thinking and Reasoning Skills. Sabbatical Leave Report: Lincoln Land Community College, Springfield: Illinois, 25p.
- Kemmis, S. (1985) Action Research and the Politics of Reflection. In David Boud, Rosemary Keogh and David Walker (eds), *Reflection: Turning Experience into Learning*, Kogan Page: London.



King, E. (1993) An investigation into the learning experiences of mature students entering higher education. *Paper presented at the 'Improving Student Learning Symposium' Research and Practice. Warwick University, September 1993.*

Laurillard, D. (1984) Learning from Problem Solving. In F. Marton, D. Hounsell and N. Entwistle (eds), *The Experience of Learning*, Edinburgh: Scottish Academic Press.

Lewin, K. (1936) *The Principles of Topological Psychology*. McGraw Hill.

Limerick, D.C. (1990) Managers of Meaning: From Bob Geldof's Band Aid To Australian CEOs. *Organisational Dynamics*, 18(4), 22-33.

Lockwood, F (1992) *Activities in Self-Instructional Texts*. Guildford: Kogan Page.

Marton, F, Dall'Alba, G and Beaty, E (1993) Conceptions of Learning, *International Journal of Educational Research*, 19(3), 277-300.

Marton, F. and Saljo, R. (1976) "On qualitative differences in learning, outcomes and processes I and II." *British Journal of Educational Psychology*, 46, 4-11.

Marton, F. and Saljo, R. (1976) "On qualitative differences in learning, outcomes and processes I and II." *British Journal of Educational Psychology*, 46, 115-127.

Marton, F. (1981) Phenomenography - Describing Conceptions of the World Around Us. *Instructional Science*, 10, 177-200.

Mays, W. (1985) Thinking Skills Programmes: An Analysis *New Ideas Psychol* 3(2) 149-163.

McPeck, J.E. (1990) *Teaching Critical Thinking: Dialogue and Dialectic* London: Routledge.

Miller, C M L and Parlett, M (1974) *Up to the Mark - a study of the examination game*. London: Society for Research into Higher Education.

Moeller, T.G. (1985) Using Classroom Debates in Teaching Developmental Psychology. *Teaching of Psychology*. 12(4), 207-209.

Morgan, A., Gibbs, G. and Taylor, E. (1981) What Do Open University Students Initially

Understand about Learning? *Study Methods Group*, Report No. 8, Institute of Educational Technology, The Open University.

Morgan, A. Taylor, E. and Gibbs, G. (1982) Variations in Students' Approaches to Studying *British Journal of Educational Technology* 13(2) 107-113.

Morgan, A. (1983) Theoretical Aspects of Project Based Learning In Higher Education *British Journal of Educational Technology*, 14(1), 66-78.

Morgan, A. (1990) Whatever Happened to the Silent Scientific Revolution? --- Research, Theory and Practice in Distance Education. *Student Research Centre*, Report No. 35, Institute of Educational Technology, The Open University.

Morgan, A (1991) *Theorising Adult Change and Development*, in Research in Distance Education, vol. 2, eds Evans, T and Juler, P. Geelong, Victoria: deakin University Press.

Morgan, A. (1991a) *Research into Student Learning in Distance Education*, Australia: Deakin University.

Morgan, A. (1991b) *Case-Study Research in Distance Education*, Australia: Deakin University.

Morgan, A. (1993) Improving Your Students' Learning: Reflections on the Experience of Study. London: Kogan Page.

Norris, N. (1990) 'Traditional Approaches Under Attack'. *Understanding Educational Evaluation*. Kogan Page: London.

Norris, S.P. (1990) Thinking about critical thinking: philosophers can't go it alone. In McPeck, J.E. (1990) *Teaching Critical Thinking Dialogue and Dialectic* London: Routledge.

North, S. (1990) Personal Writing, Professional Ethos, and the Voice of Common Sense. *Pretext: A journal of rhetorical theory*, 11(1-2), 105-119.

Northedge, A. (1975) Learning through discussion in the Open University. *Teaching at a distance*, 2, 10-19.

Norton, L.S. and Crowley, C.M. (1995) Can students be helped to learn how to learn? an evaluation of an Approaches to Learning programme for first year degree students. *Higher*



*Education*, 29, 307-328.

Oxford Centre for Staff Development (1994) In G. Gibbs (ed.) *Improving Student Learning Through Assessment and Evaluation*, Oxford: Oxonian Rewley Press Ltd.

Parlett, M. and Hamilton, G (1977) *Introduction to Illuminative Evaluation: Studies in Higher Education*. California: Pacific Soundings Press.

Paul, R.W. and Nosich, G.M. (1991) A proposal for the National Assessment of Higher-Order Thinking at the Community College, College, and University Levels. Commissioned paper prepared for a workshop on Assessing Higher Order Thinking and Communication Skills in College Graduates.

Perry (1970) *Forms of intellectual and ethical development in the college years - A scheme*. U.S.A.: Holt, Rhinehart and Winston, Inc.

Pierce, W., Lemke, and Smith, R. (1988) Critical Thinking and Moral Development in Secondary Students. *High School Journal*, 71(3), 120-126.

Prosser, M. and Webb, C. (1994) Relating the Process of Undergraduate Essay Writing to the Finished Product. *Studies in Higher Education*, 19(2), 125-138.

Radencich M.C. and Schumm, J.S. (1984) A Survey of College Reading/Study Skills Texts. *Reading World*, 24(2), 34-47.

Ramsden, P. and Entwistle, N.J. (1981) Effects of Academic Departments on Students Approaches to Studying *British Journal of Educational Technology* 51, 368-383.

Reber, A.S. (1985) *Dictionary of Psychology*. Penguin Books Ltd: England.

Redding, R.E. (1990) Metacognitive Instruction: Trainers Teaching Thinking Skills. *Performance Improvement Quarterly*, 3(1), 27-41.

Richardson, J.T.E. (1987) Research in Education and Cognitive Psychology in J.T.E. Richardson, M.W. Eysenck and D.W. Piper (Eds) *Student Learning: research in education and cognitive psychology* Milton Keynes: SRHE and Open University Press.

Richardson, J.T.E. (1993) Using questionnaires to evaluate student learning: some health warnings. *Paper presented at the symposium on 'Improving Student Learning: Research and Practice*. Warwick University, September 1993.

- Rogers, C. (1969) *Freedom to Learn Ohio*: Charles E. Merrill.
- Saljo, R. (1979) *Learning in the Learner's Perspective I - Some Commonsense Conceptions*. Reports from the Institute of Education, University of Gothenburg, No. 76.
- Schlichter, C.L. (1986) *Talents Unlimited: An Inservice Education Model for Teaching Thinking Skills*, *Gifted Child Quarterly*, 30(3), 119-123.
- Schon, D.A. (1983) *The Reflective Practitioner: How Professionals Think in Action*. Temple Smith: London.
- Schatz, M. (1993) 'An Epilogue: Putting Voices Together'. *Qualitative Voices in Educational Research*. Burgess Science Press: Basingstoke.
- Siegel, H. (1989) *Why be Rational? On Thinking Critically about Critical Thinking*. document, Resource Publication, Series 2 No. 1. U.S. New Jersey. 18p
- Siegel, H. (1990) *McPeck, informal logic, and the nature of critical thinking*. In McPeck, J.E. (1990) *Teaching Critical Thinking Dialogue and Dialectic* London: Routledge
- Strauss, A. and Corbin, J. (1990) *Basics of Qualitative research. Grounded Theory Procedures and Techniques*. Sage Publications, Inc. : California
- Taylor, E., Gibbs, G. and Morgan, A. (1981) *The Outcomes of Learning from the Social Science Foundation Course: Students' Understandings of Price Control, Power and Oligopoly Study Methods Group*, Report No. 9, Institute of Educational Technology, The Open University.
- Taylor, E., Morgan, A. and Gibbs, G. (1982) *Students' Perceptions of Gains from Studying D101, The Social Science Foundation Course. Study Methods Group*, Report No. 11, Institute of Educational Technology, The Open University.
- Taylor, E, Morgan, A and Gibbs, G (1981a) *The Orientations of Open University students to their studies. Teaching at a Distance*, 20, 3-12.
- Thomas, K. (1990) *Dimensions of Personality*. In *Introduction to Psychology, Volume 1*. Milton Keynes: The Open University.
- van Rossum, E J and Schenk, S M (1984) *The relationship between learning conception*,



study strategy and learning outcome. *British Journal of Educational Psychology*, 54, 73-83.

Walker, R. (1989) *Doing Research A Handbook for Teachers*. Routledge: Cambridge.

Walter, U. (1991) Debate and Critical Thinking. Paper presented at the Annual Meeting of the Central States Communication Association: Chicago, 9p.

Weiner, B. (1992) *Human Motivation Metaphors, Theories, and Research*. Sage: U.S.A.

Whyte, W.F. (1991) *Participatory Action Research*. Sage Publications, Inc.: Newbury, California.

Zuber-Skerritt, O. (1992) *Professional Development in Higher Education. A theoretical framework for action research*. Kogan Page: London.

Zuber-Skerritt, O. (1992a) *Action Research in Higher Education. Examples and Reflections*. Kogan Page: London.

#### Additional references:

Eraut, M, Alderton, J, Cole, G and Senker, P (2000). *Development of knowledge and skills at work*. In 'Differing Visions of a Learning Society, Frank Coffield (ed.), Research Findings Vol I, The Policy Press: 2000.

Jones, H.E. (1999). *Infusing Critical Thinking in Teaching Educational Theory*. Paper presented at the AARE-NZARE Conference, Melbourne.

Marsh, G.E. (1996) *Critical Thinking Skills*. In AIL 601.

Vardi, I. (1999). *Critical and creative thinking: How can it be fostered and developed at tertiary level?* In K. Martin, N. Stanley and N. Davison (Eds), *Teaching in the Disciplines/ Learning in Context*, 455-461. Proceedings of the 8<sup>th</sup> Annual Teaching Learning Forum, The University of Western Australia.

## **12. Appendices**

### ***I Aspects of the Experience of Understanding<sup>92</sup>***

#### ***The nature of understanding***

Feelings of satisfaction  
Meaning and significance  
Coherence, connectedness, and 'provisional wholeness'  
Relative irreversibility  
Confidence about explaining  
Flexibility in adapting and applying

#### ***Developing understanding***

Active engagement with the task  
Relating to previous knowledge and experience  
Using or developing a structure

#### ***Individual forms of understanding***

Breadth of understanding  
Depth or level of understanding  
Source and nature of structures

- from lectures or books
- through own structure in revision notes
- from theories
- from an individual conception of the discipline

---

<sup>92</sup> From Entwistle and Entwistle (1992)



## ***II      Forms of Understanding<sup>93</sup>***

- A.   Reproducing content from lecture notes without a clear structure**
- B.   Reproducing content and logical framework from lecture notes**
- C    Using own structure for individual topics, mainly from lecture notes**
- D.   Adjusting structures from strategic reading to meet exam requirements**
- E.   Developing an individual conception of the discipline from wide reading**

---

<sup>93</sup> From Entwistle and Entwistle, 1992

### **III      *Student Interview Details***

Interviews Conducted with Students and Staff in the Spring/Summer 1992. Below are the names of interviewees, and the dates when conducted.

#### ***Design and Media Management students 1992***

Mags, 2.4.92  
Andrea, 2.4.92  
Tony, 7.4.92  
Jackson Jessop, 19.5.92  
David Grey, 19.5.92  
Grant Kelly, 21.5.92  
A.M., 21.5.92  
Chris Anastasi, 21.5.92  
Brione Meadows, 21.5.92  
Cathy Murphy, 28.5.92  
Peggie Smith, 28.5.92  
Clare Mitchell, 28.5.92

#### ***Psychology in the Community students 1992***

Cancelled



#### ***IV Interviews with Design and Media Management staff***

***Design and Media Management staff interviewed, 1992***

**Charles O'Hanlon, 25.6.92**

**Tony Nandi, 10.7.92**

**Chris Dawson, 9.7.92**

**Teresa Moore, 10.7.92**

**J Gummery, 10.7.92**

**David Grant, 16.7.9**

## **V      *Process of Learning Outline***

Presented to students on Design and Media Management in April, 1993

### **Design and Media Management**

#### **Human Resource Management: Process of Learning, second semester, 1993**

Time 10-1, on Mondays: 19th, 26th of April and 10th, 17th of May

Hand in date for Assignment: June 17th

Facilitator: David Fitzgerald

In this course, students and facilitator will work together in exploring and reflecting upon the course as a whole. The aim of the course is for you to critically reflect upon the learning activities, teaching and epistemic<sup>24</sup> structures that you experience in your first year studies. The focus is upon engaging your awareness of the learning activities that you engage in, in Design and Media Management year one. By critically reflecting upon these course structures it is hoped that you become more aware of why certain learning activities take place, what leads to effective learning/understanding and discover how you can make the course more personally meaningful to you. Through this awareness, which will be created by partaking in a variety of individual and group activities, it is hoped that you will have a more involved, questioning appreciation of the way Design and Media Management works, and how you might apply it meaningfully. Through involvement with the learning process you may then be able to make proposals for improving the course.

These issues then will be the focus for exploration in the assignment.

We shall break the course up into three integrated parts for clarity. It is important to see the class sessions as exploratory. Ideas undergo refinement in the subsequent sessions.

#### **PART 1: Information:**

5-6 sub-sessions<sup>25</sup>, in Sessions two, three and four

---

<sup>24</sup> For example primary and secondary sources of knowledge; how models are constructed; the issue of expertise

<sup>25</sup> Each sub-session lasts approximately 20-25 minutes



**PART 2: Learning activities on first year Design and Media Management:**  
5-6 sub-sessions in Sessions two, three and four

**PART 3: Implications:**  
Reflections in Sessions 2,3 and 4

**Below is a further elaboration of the issues that we will focus upon. Session 4 will provide you with the opportunity to discuss concepts that have emerged from the exercise on the Personal Grid.**

### **Session 1, Monday 19th April 1993**

**Introduction to the course:** The course content, the methods and activities of the course and what you can expect to gain from this course will be outlined here as well as the respective responsibilities of facilitator and students.

**Kelly's Personal Grid:** an exploratory exercise in which you elicit with a partner your experiences (constructs) of learning on Design and Media Management, first year.

### **Session 2, Monday 26th April 1993**

**Reflections:** Here a summary of the previous session and its implications and an opportunity for you to discuss any observations of the previous session and its application to your learning.

**Sub-session 1: Information: passive/active, primary/secondary (micro and macro issues):** Here we engage in an exercise that explores the quality of information coming to you and the implications of that quality for your learning and understanding. Also what is the difference for understanding do you feel, between your involvement in constructing understanding over passive understanding?

**Sub-session 2: Information: information flood/expertise:** With so much information available to us, what are the criteria by which it should be judged? How should it be evaluated? Is quantity necessarily the way to understanding? What do experts do? Who are they?!

**Sub-session 3: Information: handling of information, how best to do it?** What do you feel is the direction that ought to be taken in learning on Design and Media Management,

with respect to information?

**Sub-session 4: Understanding: assessment:** What experiences of assessment have you had on the course? What do you feel has worked best for you? What benefits can be derived from the different forms of assessment? What shortcomings are there?

**Ground rules, and a simple exercise to do with your Personal Grid for the next session.**

### **Session 3, Monday 10th May**

**Reflections.**

**Sub-session 5: Information/knowledge: paradigms, theories-information:** What happens to information, how do you work with it on Design and Media Management? What are the methods that they (economists, psychologists..) employ to represent reality? How might you apply them to reality?

**Sub-session 6: Learning activities: thinking about group and individual learning experiences in the context of other viewpoints, plurality of views:** What can we learn from the experiences of discussing ideas with others, and experiencing other people's viewpoints? Does it improve understanding of 'issues'?

**Sub-session 7: Information/emotions: Objectivity/Subjectivity:** How important are emotions to understanding? For instance, issues on the course: what are the different ways in which we may look at issues in management studies/design, and what are their relative merits?

**Sub-session 8: Information: evaluation of arguments in management studies:** What types of problems or challenges do psychologists/management theorists/economists... attempt to understand and act on?

**Proposals for final session number 4, based on Personal Grid**

**Details of assignment and references (hand in date 17th June).**

### **Session 4, Monday 17th May**



**Reflections.**

**Concepts nominated by class from Personal Grid for discussion**

**Conclusions**

**Any queries**

**(I am available for discussion, or to arrange an appointment if there are any queries that you may have about the course.)**

## **VI     *Personal Development Outline***

Presented to students on Psychology in the Community in February 1993

### **Psychology in the Community, *Personal Development*, second semester, 1993**

**Room: w324**

**Time 11-12, else 12-1 every fortnight on Wednesdays**

**Facilitator: David Fitzgerald**

**In this course, students and facilitator will work together in exploring and reflecting upon the course as a whole. The focus is upon engaging your awareness of the learning activities that you engage in, in Psychology in the Community, year one. Through this awareness, which will be created through partaking in a variety of individual and group activities, it is hoped that you will have a more active, questioning appreciation of the way psychology works, and how you might apply it meaningfully.**

**We shall break the course up into three integrated parts for clarity. See the course as developing across the sessions.**

#### **PART 1: Information:**

**3 subsessions<sup>∞</sup>, in lessons one and two,**

#### **PART 2: Understanding:**

**5 subsessions in lessons three, four and five,**

#### **PART 3: Implications:**

**Sessions six and seven,**

**Below is a further elaboration of the issues that we will focus upon. If there are any issues that you feel merit discussion on top of these, then feel free to raise them for discussion.**

#### **Session 1**

---

<sup>∞</sup> Each subsession lasts approximately 25 minutes



**Introduction to the course:** The course content, the methods and activities of the course and what the you can expect to gain from this course will be outlined here as well as the respective responsibilities of facilitator and students.

**Information: sources:** This the first of the issues we will be dealing with on the topic of information, we will explore the types of information that are available to us on the course, as well as outside the course. What are the types of information that we have experienced on the course in order to understand the psychology of people? What are the strengths and weaknesses of the different types both within the course (micro) as well as through its application outside (macro).

**Information: passive/active, primary/secondary (micro and macro issues):** Having discussed the ways in which information can be presented to you, we engage in an exercise that explores the quality of information coming to you and the implications of that quality for your learning and understanding. Also what is the difference for understanding do you feel, between your involvement in constructing understanding over passive understanding?

**Ground rules, and a simple exercise to do.**

## **Session 2**

**Reflections:** Here a brief summary of the previous session and an opportunity for you to discuss any observations of the previous session and its application to your learning.

**Sub-session 2: Information: Information flood/expertise:** With so much information available to us as psychologists, what are the criteria by which it should be judged? How should it be evaluated? Is quantity necessarily the way to understanding? What do experts do? Who are they?!

**Sub-session 3: Information: handling of information, how best to do it?** What do you feel is the direction that ought to be taken in learning to be a psychologist, with respect to information?

## **Session 3**

**Reflections.**

**Sub-session 4: Understanding: paradigms, theories-information:** What happens to information, how do psychologists work with it, what are the methods that they employ to represent reality? How might you apply them to reality? Discuss the nature of problems and issues that concern psychologists.

**Sub-session 5: Understanding: assessment:** What experiences of assessment have you had on the course? What do you feel has worked best for you? What benefits can be derived from the different forms of assessment? What shortcomings are there?

#### **Session 4**

**Reflections.**

**Sub-session 6: Understanding: thinking about group and individual learning experiences in the context of other viewpoints, plurality of views:** What can we learn from the experiences of discussing ideas with others, and experiencing other peoples viewpoints? Does it improve understanding of 'issues'?

**Sub-session 7: Understanding: Objectivity/Subjectivity:** How important are emotions to understanding? For instance issues on the course, what are the different ways in which we may look at issues in psychology, and what are their relative merits?

#### **Session 5**

**Reflections.**

**Sub-session 8: Understanding: evaluation of arguments in the social sciences:** What types of problems or challenges do psychologists attempt to understand and act on?

**Sub-session 9: Implications: regarding the course, what are the implications of what we have experienced in the last five sessions for understanding with respect to information (forms of understanding, anxiety, confidence)?** What can we do with what we have learnt from each other in the last 5 sessions? How can it be usefully applied to future studies as well as living outside the college?

#### **Session 6**

**Reflections.**

**Sub-session 10 (60 minutes): Implications: Understanding with respect to life of individual, on the street, in the work place, lifelong. Pooling of proceeds from students contributions through the sessions.**

#### **Session 7**

**Reflections.**

**Usefulness of the course for future learning:** Open discussion of how to make best use of



the experiences on personal development. Contributions from the group to be discussed, wrap up session.

## **VII Process of Learning Assignment**

**Human Resource Management  
Second Semester 1993.  
with David Fitzgerald**

May 1993

### **LEARNING ACTIVITY FOUR**

#### **The Process of Learning: Assignment (50% weighting)**

##### **Aims of the Assignment:**

The aims of this course on the process of learning are:

- to enable you to engage in critically reflecting upon the process of learning as you experience it with subjects studied<sup>77</sup> on the first year course of the Design and Media Management degree.
- and then to comment upon the implications of this process for your learning and understanding both of course issues and concepts as well as how you might apply this to the workplace or living

##### **Structure/content:**

The title of the assignment is 'The Process of Learning' . While there is a lot of flexibility regarding what you may choose to reflect upon, it is important to note the following:

- It must be an individually researched report of up to 3000 words. In the main part of the assignment (2500 words) discuss and contrast your experiences/observations of Information<sup>78</sup> and learning activities<sup>79</sup> across the first year Design and Media Management curriculum and tie these experiences in with theory. Then discuss the Implications of the main part (up to 500 words), i.e. having described and evaluated your

---

<sup>77</sup> Accountancy, economics, human resource management, photography

<sup>78</sup> For example, how you appraise ideas, concepts, theories...

<sup>79</sup> For example, group learning activities, assessment, individual work, teaching styles...



experiences with the relevant theory, you can then suggest how understanding of the course epistemic<sup>100</sup> structures as well as the learning activities could be improved.

*In summary:*

*-Discuss experiences/observations that you have had on first year Design and Media Management concerning learning activities and course knowledge (ideas, concepts, issues). Develop the framework by contrasting these with relevant readings. (2500/40%).*

*-Evaluate the implications of what you have discussed. That is, describe how greater personal meaning might be achieved from the course, through having reflected upon the process of learning in first year (500/10%).*

### **Flexibility:**

Realise that there is scope for innovation in how you go about the implications part of the assignment. You may wish to substitute supplementary information for this part such as a student handbook, video presentation, interviews with other students, graduates, employees in a firm (can involve group work if negotiated).

### **Suggestions:**

In terms of scope, it is entirely up to you to decide whether: -to select a few topics and research them in a little depth OR -to cover a broader range of topics more superficially.

There is flexibility in how you go about choosing the topics, while adhering to the structure outlined above. You may find some of the suggestions and questions below useful or you may choose some other approach:

-Looking at subjects within the first year curriculum (accountancy, economics, human resource management, photography..) evaluate the different learning activities and epistemic structures, as well as asking what do the subjects have in common. - What impedes/promotes the learning process, and how might the learning process consequently be improved?

-You may find the handout on the Kelly Grid, based upon the class work that we did useful for selecting a few topics for exploration

-You may wish to explore and justify whether a course that reflects upon the Process of Learning could be developed across the degree course? Should it be taught in first year?

---

<sup>100</sup> For example primary and secondary sources of knowledge, how models are constructed, the issue of expertise...

-You might be interested in exploring how graduates might benefit from having studied Design and Media Management, i.e. how might they apply what they have learnt on Design and Media Management to the workplace, occupation?

-Having reflected upon how you interact both with ideas and learning activities on Design and Media Management, how might you gain greater meaning from your learning, and how might you use this in everyday living?

-You could compare your experiences of learning with students on another degree in terms of the benefits for understanding.

### **References:**

Some core readings have been given out in class, that deal with the subsessions explored. It is also in the nature of this course and HRM that you have the opportunity for engaging in the research process<sup>101</sup>. Part of this process involves choosing suitable reading material.

### **Some final points:**

While this topic is an integral part of the HRM course, it also has a research element. Your feedback from, and reactions to the course and assignment are appreciated and will help in providing staff and students with feedback on the course, which you may wish to comment upon.

I will be available to meet you individually or in groups on Monday 24th May from 10-1 PM, to deal with any queries or ideas that you may have about the course and assignment. I will leave a sheet on the noticeboard for you to arrange an appointment. I am also in on Wednesday and Friday should you wish to meet then instead.

Any handouts that you may feel you have missed, can be collected from myself, Linda Raeburn in the humanities office Rm 116, or fellow students. The final session on the process of learning, number 4 will be on May 17th, between 10 and 1pm.

**DATE** for handing in assignment is Thursday, June 17th 1993

---

<sup>101</sup> So for instance you may wish to look up the library catalogue system in order to choose references for key topics that you have chosen.



## **VIII Attendance Rates**

**Attendance for Process of Learning, Design and Media Management 1992/1993  
in the order 19.4, 26.4, 10.5, 17.5**

1. Johnson Adeyinka 59%, 19.4, 26.4, 10.5, 17.5
2. Assiya Amini 75%, 19.4, 26.4, 10.5, 17.5
3. Donna Bradshaw 65%, 19.4, 26.4, 10.5
4. Lori Cooper 76%, 19.4, 26.4, 10.5, 17.5
5. Michael Fox 50%, 26.4, 10.5, 17.5
6. Piers Gabler 37%, 26.4
7. Vas Hadjivasiliou 40%, 19.4, 26.4, 17.5
8. Stephen Ireland 42%, 17.5
9. Pippa Jones 42% (unwell)
10. Tanya Jones 68%, 26.4
11. Paul Kateley 47%, 17.5
12. Sabine Khan 75%, 19.4, 26.4, 10.5
13. Thomas Knight 56%, 19.4, 26.4, 10.5
14. Carol Leddy 61%, 19.4, 26.4, 10.5
15. Gino Mainolfi 48%, 19.4, 26.4
16. Nicola Markham 55%, 19.4, 26.4, 10.5, 17.5
17. Jackie Morgan 65%, 19.4, 10.5
18. Adrian Newman 50%, 19.4, 26.4, 10.5, 17.5
19. Lyn Pryor 65%, 19.4, 10.5, 17.5
20. Jayne Ralph 55%, 19.4, 26.4, 10.5, 17.5
21. Carol Rogerson 53%, 19.4, 26.4, 10.5, 17.5
22. Caroline Smith 60%, 26.4, 17.5
23. Kirsten Stevens 40%
24. Jeremy Stumbke 50%, 19.4, 26.4, 17.5
25. Alison Trott 50%, 19.4, 10.5, 17.5

John Mitchell, 19.4, 26.4, 10.5

Chris Mathews, 10.5

Ella<sup>102</sup>, 19.4, 26.4, 10.5.

Some students may have been present but did not sign the sheet as they turned up late.

---

<sup>102</sup> Ella was a Participant Observer during the teaching of the *Process of Learning*. She also lectures in the Law department at Thames Valley University.

## **IX      *Work Collected During the Process of Learning***

**19.4.93:** Kelly grid data was collected for about 17 pairs of students and/or individuals. There were 17 ratings<sup>103</sup> of class work approximately.

**26.4.93:** Charts of class work, and approximately 18 student proceed sheets. Approximately 18 ratings including some with names were collected at the end of class.

**10.5.93:** Proceeds not collected as class did not go well. I collected a poster of class proceeds and 17 ratings approximately.

**17.5.93:** Proceeds were not collected for final session. 8 ratings were collected as well as a poster of class proceeds.

### **Methods abandoned during research:**

May/June 1992: interviews with Psychology in the Community students were cancelled, following a veto by some members of staff

The use of audio tape during teaching of the course sessions, as it was incoherent following playback afterwards. No individual could be discerned due to background noise. Also it appeared somewhat intrusive and impractical if I were to overcome this problem by placing about 6 tape recorders around the room in order to pick all students up.

Instead I chose to video record the class sessions but ran into problems here. Firstly I ran the risk of over evaluating the class while teaching as I was collecting proceeds from the of their work, asking them to rate the sessions and later on to do interviews. Secondly I had difficulty on some occasions with teaching the sessions and it would have been impossible as well as a bit rich to be monitoring a video camera while trying to teach. Also there were technical problems with trying to film the class, the way it was organised. It required having someone on the job while I was teaching. Finally some students were uneasy about being filmed! As a result of this, I decided to stop filming

---

<sup>103</sup> At the end of the Session students were asked to provide feedback, for evaluation purposes, on how they felt the Session had been. They were asked to write down thoughts that they had about what they liked and disliked about the Session. Finally they were asked for any suggestions that they might have for improving the *Process of Learning*.



## **X      *Data Constructed In Session 1 of the Process of Learning***

Based upon (Kelly's, 1975) personal construct theory, students were asked to construct a grid that focused upon their perceptions of learning. The question that they asked each other, while working in pairs was:

In what way are 2 subjects on Design and Media Management year 1 similar and different from another subject on Design and Media Management year 1?

Human Resource Management had to be included in each evaluation. The following data represent continuums along which the students constructed salient aspects of their learning. For example, in the first set of data, learning is seen to be important in terms of whether it involves group learning or individual learning. Likewise it is important for Vas/John whether the course is structured or more towards unstructured and so on.

*12 records below*

**Vas/John** found the following constructs important in their learning:

*For example, course subjects can be more or less interesting*

*Also courses can be more towards theoretical or more towards practical and so on*

group work/individual work,

more practical research focused/ text book-lecture oriented,

stimulating-practical/not stimulating-theoretical,

more demanding concentration/ less concentration required

numerical/ non numerical,

identifiable outcomes/ vague,

less technical/ more...,

structured/non structured.

**Ali/Paul:**

not clear

**Sabine Khan:**

art based/theoretical

computer oriented/Over Head Projector based

dictation/creative

studio based/lecture classroom  
numerical/grammatical  
individual work/ group work  
visual/ aural  
technological/ psychological  
paper based/ discussion based  
structured/experimental

**Jeremy Stumbke:**

group/individual  
paper based/ computer  
creative/ theoretical  
mathematical/ research  
numerical/ grammatical  
art/psychology  
informal/ formal  
theory/ practical  
structural/ practical  
structural/ experimental  
design/ academic

**Jackie Morgan:**

individual/ group  
numeric/ language  
formula/ ideologies  
creative/ structured  
artistic/ practical  
spoon-fed/ research  
trial and error/ analytical  
product oriented/ task  
disciplined/ undisciplined  
supply/research

**Donna Bradshaw:**

abstract/ concrete  
physical/ mental  
boring/ interesting



structural/ open ended  
repetitive/ succinct  
figures/ word  
conditional/ questionable  
visual/ demonstrative  
equipment based/ people based  
business improvement/ people improvement

**Assiya Amini:**

objective/ subjective  
tangible/ intangible  
visible/ invisible  
formula oriented/ creative oriented  
money related/ human aspect related  
imaginative/ realistic  
human/ numerical  
jargon free/ jargon related

**Lori Cooper:**

specific/ unspecified  
audio related/ visually related  
creative/ abstract  
mechanised/ unmechanised  
specific problems/ general problems  
likeable/ dislikeable  
meaningful/ impersonal  
structured/ unstructured

**Carol Liddy:**

essay writing/ no essay writing required  
complement better/ less complementary  
not visual/ visual  
technology oriented/ not technology oriented  
reasoning/ less reasoning  
numerical/ literary  
useless/ useful  
equip necessary/ equipment not necessary

not based on opinion/ opinion based  
one lecture / several lecturers

**Carol Rogerson:**

individual work/group work  
liked/disliked  
practical/ less practical  
less easy to understand/ easy to understand  
low turnout for lecture/high turnout for lecture  
research based/ not research based  
no enthusiasm from class/ high enthusiasm for the class

**Johnson Adeyinka:**

data based/ behaviour based  
applicable theory for academic use/ applicable theory for consumer use  
technical based/ theoretical based  
human behaviour/rules  
personal involvement/detached from subject

**Gino Mainolfi:**

number based/ theoretical  
stick to rules/ flexible no right wrong answers  
data analysis/ not rigid  
practical/ no visible result  
product marketing/ no sale involved  
figure based/ no figures  
exploration/ non creative  
technological/ non technological  
consumer based/ financial

**Nicola Markham:**

numerical/ language-non numerical  
analyse humans-breakdown/ technical-self exploration  
wide scope and self searching/ technical + recording  
practical and creative/ constricted  
group work/ individual



numerical and organised and form/ deal with people not numbers  
lecture based/ tutorial based  
material based/ literature based  
word and numbers/ image based  
deals with human wants and needs/ creative and images

**Jayne Ralph:**

creative/ informative  
group-proved/ futuristic-change  
group based/ individual work  
non presentation based/ presentation based  
non constricting/ constricting  
technical practical/ non technical practical  
human behaviour/ numerical info  
research learning/ self teaching  
forever changing format/ never changing format

**Lyn Pryor/Adrian Newman:**

creative/ non creative  
psychologically based/ numerical  
text book based/ image based  
all need research methods/ not computer based  
personal ideas/ material based  
lecture based/ presentations  
all based on theories/ people based  
visually based/ manual

**stx:**

information/ practical  
public information/ numerical  
practical / theory  
informative / not immediately informative  
structured/ freedom of choice  
organised/ disorganised

## ***XI      Grades Awarded for the Process of Learning Assignment, 1993***

1. Johnson Adeyinka 59%
2. Assiya Amini<sup>104</sup> 75%
3. **Donna Bradshaw 65%**
4. **Lori Cooper 76%**
5. Michael Fox 50%
6. Piers Gabler 37%
7. **Vas Hadjivasiliou 40%**
8. Stephen Ireland 42%
9. Pippa Jones 42%
10. Tanya Jones 68%
11. Paul Kateley 47%
12. Sabine Khan 75%
13. Thomas Knight 56%
14. Carol Leddy 61%
15. Gino Mainolfi 48%
16. **Nicola Markham 55%**
17. **Jackie Morgan 65%**
18. Adrian Newman 50%
19. Lyn Pryor 65%
20. **Jayne Ralph 55%**
21. **Carol Rogerson 53%**
22. Caroline Smith 60%
23. Kirsten Stevens 40%
24. Jeremy Stumbke 50%
25. Alison Trott 50%

---

<sup>104</sup> Students who were assessed in chapter 9 are in bold



## **XII Analysis of the Process of Learning Assignment**

The following comments describe feedback provided to students on the *Process of Learning* course who completed the assignment. The mark and comment together reflect analysis of the report by both myself and my co marker Dr Dave Grant, followed by agreement on a final mark.

### **Adrian, Newman 50%**

Good point was made of how City Bag Store developed skills and how these skills might be applied. Many important points made but report was very short on specific examples to highlight these general statements such as point made about how Design and Media Management improves students understanding. The most important area where you could improve the quality of the report (and which was crucial) was in incorporating theory into your arguments which was not there apart from reference to Kelly (it was not as crucial to the report as suggested in report). Conclusion could have been elaborated. Also remember to include bibliography.

---

*The assignment for the process of learning (HRM) was assessed by myself (David Fitzgerald) and Dr. David Grant. I have provided the feedback above, which in agreement with David Grant would reflect a summary of both our comments.*

*I would also like to take this opportunity to thank you (the student) for your valued cooperation in providing feedback about this course as well as Design and Media Management year 1, both during the second semester as well as in agreeing to be interviewed afterwards. Your feedback both in thoughts and feelings will help in improving the quality of teaching and learning on the Design and Media Management degree course in the coming year and beyond..*

*Most importantly I would be very keen to hear your reactions to Design and Media Management so far. In this regard I would be grateful if you would conduct the Self Report Questionnaire provided and post the cassette back to me within the next 3 days. Thanks again for your cooperation.*

This message (in italics) was sent to all non respondents for interviewing, with the feedback<sup>109</sup>.

---

<sup>109</sup> The following note was sent out to all students who had responded to my call for interviewing:

### **Stephen Ireland 42%**

The introduction was good in that it outlined the plan for the report. Also the experiences described were illuminative and clear. However in the report it was necessary to show evidence of theoretical reading and possibly fieldwork. So while the points made based on experiences were very good they needed to be substantiated by theory- otherwise it became purely a subjective account.

### **Kirsten Stevens 40%**

There were some very good points made based upon experiences of Design and Media Management during the year 1 curriculum. However there were crucial areas where the 'report' could be improved. Firstly, it was not carried out in report format. Secondly, the answer is highly subjective and no reference was made to theory on any of the issues described. This was crucial to the nature of the report. Therefore the points made would be subjective and uncritical. The points and claims made needed to be substantiated by theory, otherwise the report risked becoming purely subjective and uncritical.

### **Gino Mainolfi 48%**

Some very good points were made and questions raised about Design and Media Management assessment, student motivation and group work versus individual work. Also attempts were made to relate it to real life.

Areas where the report could have been improved were:

- outline in an introduction the themes and direction of the report, as this would help give the essay greater coherency and integration.
- it was *crucial* to have incorporated theory into your account
- more attention needed to be paid to the information side of the report and finally,
- the implications part of the report required greater elaboration and consideration.

### **Carol Leddy 61%**

---

The assignment for the process of learning (IIRM) was assessed by myself (David Fitzgerald) and Dr. David Grant. I have provided the feedback above, which in agreement with David Grant would reflect a summary of both our comments.

I would also like to take this opportunity to thank you for your valued cooperation in providing feedback about this course as well as Design and Media Management year 1, both during the second semester as well as in agreeing to be interviewed afterwards. Your feedback both in thoughts and feelings should help in improving the quality of teaching and learning on the Design and Media Management degree course in the coming year (s)..



The introduction to the report was clear and directional. Good points were made about the relationships across the different disciplines on Design and Media Management. The approach taken was very interesting conceptually.

In some areas improvement could have been made by use of examples to make points clear. For instance when describing the innovative nature of HRM/ photography yet one is unclear of what conventional method it replaced.

More reading could have made for a better balance between experience and theory as well as providing a tighter framework for the report.

Finally the Information side of the report could have been given more attention. Otherwise the report was a good attempt first time!

#### Johnson Adeyinka 59%

Overall the report was well structured and clearly laid out. The section dealing with the issue of information and the implications section were good attempts at integrating experience with theory. Perhaps more use though could have been made of the theories of learning also the section on learning activities needed to be expanded.

#### Piers Gabler 37%

The report appears hurriedly written with basic errors on the first page. There are also misconceptions regarding the methods of teaching being described as new. In order to improve the quality of this report I have outlined the areas where progress can be made:

- where experiences were described or claims were made based on the subjective experience of the student in this essay it was important to substantiate these claims with evidence of relevant readings in the area. otherwise the report ran the risk of being subjective and vague.

- the structure of the report could be improved by outlining the direction of your arguments more explicitly, for example by paying direct attention to the Information theme of the report as well as the Learning Activities theme of the report.

- also use specific examples to illustrate claims.

#### Lyn Pryor 65%

The report was well structured and valid in taking a broad number of issues and looking at them briefly. The integration of theory with experiences was well done. In the implications section of the report important points were made.

Areas where the report might be improved are:

- through a clearer, more 'thoughtful' introduction

- also the Information theme could have been highlighted more saliently &

-use of survey work (even on a small scale basis) could enhance this report.

Otherwise well done for your first attempt!

**Jeremy Stumbke 50%**

The report gave a good account of your experiences of assessment, information, group and individual work. However it was necessary to integrate these experiences within a theoretical analysis, otherwise it became purely a personal view. The problem with this is that statements or claims are made without empirical evidence or theoretical comparison. This was necessary for the report. Despite this there were some interesting points made. I am sorry you feel things have not worked out for you in your studies this year, I wish you the best in your new course and college.

**Sabine Khan 75%**

Your report demonstrated in a very constructive manner, a keen appreciation of the nature of assessment on Design and Media Management, both treated as a learning activity as well as an information theme. The report describes the rationale as well as the difficulties of assessment on Design and Media Management as well as proposing methods for improving assessment methods which are quite sophisticated. The theoretical readings are very relevant and your account of experiences highlight clearly the issues that are at stake. In sum, the report is constructive in its approach, easy to follow, and sophisticated overall in its feel. Well done for your first attempt!

**Michael Fox 50%**

References were made to field work but no tangible evidence/citations. In order to improve the report it would also be necessary to have included relevant readings and to have integrated these with your experiences of first year Design and Media Management. Also a clear indication of the direction, rationale and aims of the report would have improved the quality of the report made from the outset. Some good points were made in the conclusion section.

**Alison Trott 50%**

Essentially a personal critique of teaching styles and assessment, though perceptive and honest. No real evidence of reading or survey work. this could be a very good report if reference was made to theory.

**Paul Kateley 47%**



The report is a clear, though almost wholly subjective description and evaluation of first year Design and Media Management teaching methods. Some very good points are made on both information and learning activities, that suggest that trouble has been taken in writing this report. However it was crucial in this report to incorporate theory (other than Kelly) with experience and to then evaluate this in the implications section.

**Pippa Jones 42%**

This report is essentially a descriptive account of Design and Media Management year 1, with very little evidence of reading. It could be improved through a clearer introduction as well as being more comprehensive in size and scope.

**Caroline Smith 60%**

4 good areas to explore. the first- motivation integrates theory with practice. This report ties in experiences with theory very well. Proactive, creative implications are suggested for incoming students though would have liked more written within formal report. Overall it is a competent report, with easy improvement if the implications section had also a more formal written section.

**Thomas Knight 56%**

Report could be improved through clearer presentation and clearer statements. Evidence of reading but no bibliography. Some interesting observations made in this report but lack of precision. Otherwise good first attempt.

**Assiya Amin 75%**

Very good wide ranging commentary on the process of learning including:

- experiences of first year Design and Media Management
- integration with theory
- well researched/survey work
- suggestions for improvement based upon the findings.

Overall a confident and constructive approach to reflecting upon the process of learning and its implications for improving the quality of learning.

**Carol Rogerson 53%**

The report shows a keen sophisticated appreciation of experiences on first year Design and Media Management. The style of expression is clear, lucid. The report is conducted in a semi-constructive way however there is no evidence of relevant readings, there are no citations. Important questions were raised by the report, that might have had answers had theoretical readings been referred to.

**Donna Bradshaw 65%**

The introduction to the essay was clear and directional providing structure for the report. Good integration of personal experiences with theory on the issue of assessment and teaching methods, thereby attending to both themes in the first part of the report.

The report is clear overall and easy to follow.

Perhaps where it might be improved is through elaborating a little more on the issue of Information (it does not come through as strongly as the Learning Activities section) Also use of survey research would have enhanced the overall report. Well done, first time!

**Lori Cooper 76%**

A clear, lucid well researched report of 2 topics in-depth. Impressive effort to find out more through interviewing students. Integration of theory with experiences is well done followed by implications section offering constructive ways forward. It would have been interesting to have read some of the comments from the interviewees. Otherwise a very good start for a first time commentary on the process of learning. Well done!

**Nicola Markham 55%**

The experiences described of first year Design and Media Management are insightful. The introduction also offers a promising report, however in order to improve it is necessary to have included theory (other than Kelly alone) in relation to the experiences described. The information side of the report also needed more intention.

**Jackie Morgan 65%**

Very good effort for first attempt, as demonstrated through relevant research carried out and its integration with experiences (such as the use of terminology, cultural background, expertise, and group-work).

Areas where the report might be improved are through:

- use of citations in report
- also the recommendations could have included more based upon a very promising first part



- use of survey work

### **Tanya Jones 68%**

Well researched, the theoretical analysis was integrated competently with experiences of Design and Media Management year 1. Impressive were descriptions of the perceptions of the aims of Design and Media Management, how we infer the occurrence of learning, and the learning process and Design and Media Management.

Areas where improvement might have been made were through a clearer introduction, better citation of references, and perhaps the initiation of survey work.

Very good first time commentary!

### **Vas Hadjivasiliou 40%**

I have suggested a number of ways in which you could improve the quality of your reporting below which you may find useful for future reference:

- be sure to give an outline or direction in the introduction of your report as to the rationale and aims of your report
- it is important to have evidence to back up claims made based upon experience
- the report had the feel of being a snapshot approach to the assignment, it was important that the report was less descriptive and had more of an evaluative nature about it
- crucial to the report was evidence of theoretical analysis
- also it was necessary to have a section that discussed the implications of your experiences as integrated with theory.

### **Jayne Ralph 55%**

Report has experiences, observations, personal conclusions and theoretical comparison, this is good. However it was necessary for the theory to integrate more clearly with your experiences. The implications section is honest but lacks substantive empirical backing. Otherwise a good attempt.

### ***XIII Interviews Conducted in June/July 1993***

*Design and Media Management students 1993. Eight confidential interviews of 25 chosen randomly for either face to face interview or self report questionnaire.*

GG and HH, 4.6.93, face to face interviews

EE, 8.6.93, face to face interview

FF, 21.6.93, self report questionnaire.

DD, 11.6.93, face to face interview

TJ, 14.6.93, face to face interview

CC and BB, 14.6.93, face to face interview

AA, 23.6.93, self report questionnaire.



#### **XIV Interview Conducted with Ella the Participant Observer**

*As a Participant Observer on both Design and Media Management and the Process of Learning, Ella sat in on 3 of the Process of Learning sessions each of 3-3and 1/2 hours duration. Ella is a lecturer in law at Thames Valley University*

**Ella, 1.7.93, transcript of face to face interview**

**Interviewer (myself):** I described the course to you, what was the course about regarding the aims and content? What did you feel about it?

*Ella:* I would say that we were doing interesting things but it was nevertheless unclear why we were doing them. This did leave me a little bit up in the air, and maybe I had more a problems than the other students because of my expectations of what learning theory was about, which were clearly different from your expectations. This Kelly grid and all the rest I had never heard of it and what the implications of it might be. Therefore I was confused. I expected to have discussion of learning theories followed by exercises which would demonstrate those learning theories, but perhaps ones that I was more familiar with and some debriefing sessions of some kind. But as it happened they were theories that I was not familiar with, which threw me a little as I thought I knew what there was to know, but clearly I did not.

**Interviewer:** What about the content then...?

*Ella:* What is getting in my way is a way of doing things over many years, so that I have difficulty with what you are trying to do. So if I was to put finger on the one thing that students do badly, it is the failure by students to identify the principle that they are talking about, they leap to the conclusion and they don't work out what principles they applied in doing that. And because the applications are always problematic, if you leap to a conclusion you are not aware of what principle you have applied in the first place. So you can't really speak in a really rigorous way. So I would have expected some (of your) teaching to deal with distinguishing between principle and just illustrative, some of stuff on deep shallow, and perhaps some exercises on that. Some of the Honey and Mumford stuff on learning styles. I would have expected a bit also on the Kolb cycle. So it was all a bit surprising for me approaching it from a different angle and I was not sure what the angle was.

**Interviewer:** How did you feel about the course, while sitting in on the sessions?

*Ella:* I felt it was intriguing. I was interested in knowing what it was about and what it meant and what it was for and what it was believed to be for. I told you at the time to provide the material on a handout and there should have been a greater handing over of knowledge if you see what I mean like - 'you can have it, here you are don't worry about not having understood what I am saying to you, it is here on this piece of paper'. Then use the paper in the exercises so that you can refer to something that you haven't understood clearly so that you can go back until you have understood. So I felt that perhaps you were holding back a little bit and you were worried about losing control if you actually did let them have what they needed I wondered that you might be a bit nervous about that.

**Interviewer:** So ... I should have provided more concrete material at the time...?

*Ella:* Yes, provide some easy points so that they can get into the dialogue, (because the issues explored require a whole class anyway) from a quite sensible point of view. You are not giving much away by giving out a few basic points - and this can then develop in the discussion, in the games, and in the arguments. That is my preferred way of doing it. For example, I tried to fill in those grids (Kelly) and I could not understand it. Yet if the instructions had been there we could have kept referring to it and finally got it right rather than having to wait for you to come around, so an organisational improvement could be made.

**Interviewer:** What do you consider the strengths of the course are?

*Ella:* I think it is good that we should try new things, and make people aware of learning processes, I'm not sure if it stops at learning processes.....<sup>106</sup> ..... it is good to have the group work and the students talking to each other, this is always more entertaining than trying to give lectures. I think there was a lot of interesting material there in terms of the stuff covered. This is all the more reason for making it more graspable to the students. I do not think it is bad that it is weighty. The whole idea or point of going to University is that it should be difficult, but that to get into the difficult bit which you can do in a very short time. Nevertheless one has to start with some very broad principles and then get in via an exercise to some intractable problems. So one can be working at PhD level within that confine provided it is planned to get you from knowing nothing to the basic principles, to the difficulties of the basic principles and then actually to be put in a situation where the principles do not work quite as well as one would expect them to and then you try to beat yourself out of that paper bag, preferably assisted (by some simple ideas/principles).

**Interviewer:** What did you consider the weaknesses of the course. You have

---

<sup>106</sup> Planes flying overhead at Heathrow airport, made it impossible to hear Ella's response later, when I played back the tape!!



mentioned some?

*Ella:* Yes you use jargon that nobody understands. Do you remember I asked you, and I asked the students and they had not met the words before, and were glad that I had asked. So it also therefore important to have an atmosphere (in the class) for them to be able to tell you that things were not right, that they could not understand what you were saying, you had not created that. I think it had something to do with what caused you not to hand the material over to them in the first place. I think there is this feeling that you have got to keep control in some way and that actually distanced them from you. But if they are feeling threatened because they have not got a grasp of the stuff and they are not quite sure what is going on, then you are less likely to get much truth because they are sitting there feeling threatened?

**Interviewer:** And what about the content of the course...

*Ella:* No I think it was reasonable. It was a nice mix of activities.

**Interviewer:** Could you please summarise your perceptions of the course?

*Ella:* It is a very good idea and a very good course and but I think you need to do for your own benefit is to be clear in your own mind what your objectives and how you are going to achieve them so that you can actually evaluate them all the time. So I do not think that you were clear in your own mind what you were trying to achieve, and how you were going to achieve it, and how you were going to know whether you had achieved it or not, you were sucking it and seeing, and like when everyone starts out, you were getting it haywire, but that is unavoidable if you try something different. There will be a time when you really have got no idea when you are getting it right. The only way you can find out is by having a rethink. For example I think it was this business of not having the material beforehand. You could have said that the reason why they are doing this is X and Y and then at end of class state whether X and Y had been achieved. By getting responses you could then ask whether they had achieved the goals. You must take the students into partnership. I hope it will happen again, because there is much you can learn from it and it would be a shame to throw it all away having learnt it. ....

The problem with experiential learning is how do you feed in the theory. .... <sup>107</sup> ..... you need 2 things going in tandem which can be very difficult to organise. Also it would be nice to feed in those experiences to the more advanced theory rather than just discover how wonderful I am at doing things. ....

---

<sup>107</sup> Heathrow planes again!

..... A lot of people do things without any theoretical concept of why they are doing it, so it only becomes non transferable without theoretical basis. Of course one can have the wrong theoretical basis, but can learn why it is not working and can then modify the theory. So it is very awkward if you do not have a theory to start with. I think in your course you were giving people an experience, you were then bringing the theory, but I think it could have been integrated a little bit more so that the theory was brought in immediately and in relation to the experience as the students were feeling it ... .. so they need to be brought closer together especially for us immature types.

**Interviewer:** What problems do you feel there might have been with my teaching methods?

*Ella:* Make your aims clearer, building in evaluation, and more than anything else letting go, letting go of that control. I do not know how one does it, it is very difficult. The mental image cum stereotype is own of teacher in control, but you can let go without anarchy. But it allows students into a position of partnership. .... It took me an awful long time [as a teacher], but eventually something gives and you get an awful lot more fun by letting them do it their way, so you provide them with everything that is necessary..... don't organise them so that they can't do it. You only set them things that they can do, but not completely. Let them have something challenging and uh, you are organising to let it happen but they make it happen and through the strengths of their groups they can challenge ..... then come back and get them to see other points of view. It is not a question of right or wrong. But it is not a formula thing, it is a question of how one feels inside... [gives example of something she does in class] .....

Keep an eye on what is going on, think how you were yourself in college, but don't control thoughts that every student has, .... let the student generate both good/bad, keep an eye on this. Did you have a need to stay ahead of students, causing an unconscious set of barriers between you and students? You need to be open to a degree that you do not know everything. I suggest that you think about whether you are nervous about losing control. I felt this to be the case through you not giving handouts and therefore I was forced to listen to you, and even then I did not understand.

**Interviewer:** What do you think of suitability of such a course to management students?

*Ella:* ..... acoplanes overhead..... management involves understanding so the course was suitable. Regarding the knowledge part of course, the ideas on expertise were very useful and 'taught' students not to be intimidated by experts, to understand that experts



have constraints upon them.... perhaps best served by relating to a piece of work. Here it might be good to collaborate with another lecturer but this is hard to do. Certainly it would have served the project [city bag project] students well. I think it needed to be very easy at the beginning of the session and then let it rip.

**Interviewer:** Should Process of Learning be taught on first year on Design and Media Management course, law etc.?

*Ella:* Yes, we need to get away from understanding of learning as pure knowledge transmission. One has to focus students attention on the skills involved in acquiring and handling that knowledge and the possibility of developing those skills, of refining them and making them better. The longer you allow them to think that it is just a matter of accumulating information, the longer you hold back a whole range of students that might be very talented. So the sooner you start the better. Our students here in TV, 9/10 have not understood it, they need to be directed towards it, especially with students having difficulty, but you need to gear the course towards them.

As far as the top levels are concerned I wouldn't put a limit on it. I wouldn't exclude it from the syllabus. What we need is cunning and deviousness. Our problem is that we start at a middle level of abstraction that ignores the people below, but we could get to these people if we talk to them more and we have more 2 way process more feedback. And they would help with the difficulties, I mean once we know what the difficulties are we could help them but we set things up so that we can't hear them. We constantly get 'Students are stupid whatever' but they are not. They may have learning binds preventing them from learning but they are not stupid. The thing is that you have to be able to talk to them in a way that they feel that they can describe to you what it is like and get a sympathetic hearing. And to give them some ideas as to things they might try, and constant support until they break out of the bind. It is a question of getting closer to the nature of understanding what the bind is and there is a lot of fear, fear related to the belief that knowledge and intelligence are inborn and if you fail you are unintelligent and there is nothing that can be done about it and what you really need to be able to do is to hide that. That must be a theory that is implicitly accepted by 99% of the population, and it makes you frightened of appearing incompetent and that fear makes it very difficult to evaluate what you are doing objectively and plan for overcoming your problems. In that state you go to the lecturer and ask for help, and the lecturer by body language, by what they say, in a hundred different ways they confirm your inadequacy, because they believe that theory as well.

I think another thing is class background, cultural background - there can be a very big cultural gap between the person facilitating the learning and the learner and so because of

your lack of understanding of that culture you can't intervene terribly effectively because you lack the manoeuvrability of a person whose culture you understand. .... Take the example of West Indian girls seeing 'being academic' as meaning being white. Do we blame the literature? Another example is that of Kipling using racist language which is very deskilling. What they do not realise is that the white man is born to make judgements that white males are perfect and that is pure crap. The truth is that we are all muddleheaded as humans, but they need to understand that being a muddlehead does not prevent you from academia. The division between white and black is totally superficial.